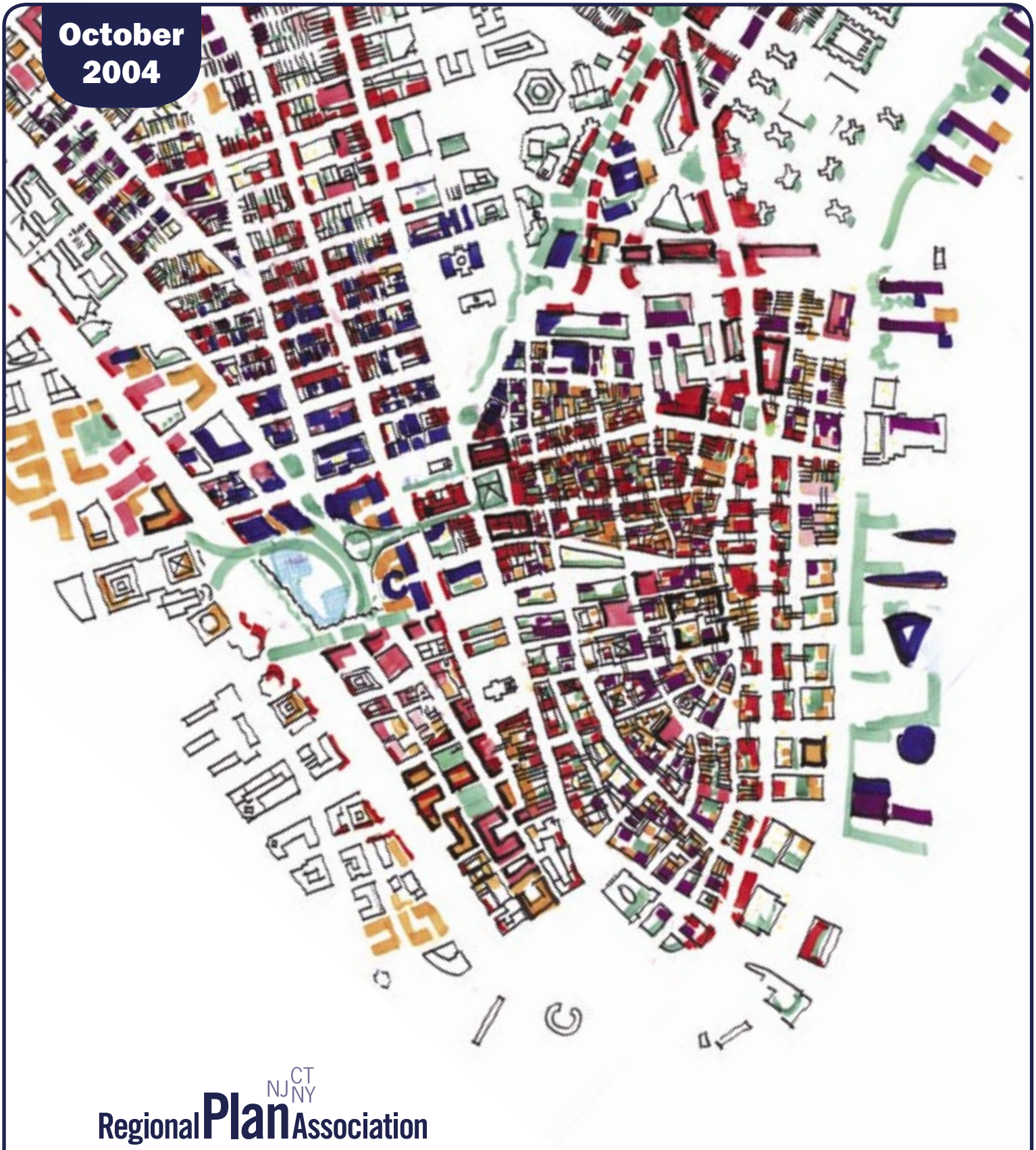
October
2004



Regional Plan Association
NJ CT NY

A Civic Assessment of the Lower Manhattan Planning Process

A Regional Plan Association report to the Civic Alliance

Cover Image: "Density with Diversity": an illustration from the Civic Alliance Planning Workshop for Lower Manhattan, December 2002, illustrating the potential for intensive, mixed uses downtown.

TABLE OF CONTENTS

INTRODUCTION 3 BACKGROUND 4
MAJOR FINDINGS AND RECOMMENDATIONS 6
ECONOMIC DEVELOPMENT 10 TRANSPORTATION 14 MEMORIAL 20 URBAN DESIGN / WTC SITE PLANNING 22
CIVIC AMENITIES 26 SOCIAL, ECONOMIC AND ENVIRONMENTAL JUSTICE 30
GREEN BUILDINGS AND SUSTAINABLE SYSTEMS 32 REGULATORY FRAMEWORK 34 ENDNOTES AND GLOSSARY OF ACRONYMS 35 ACKNOWLEDGEMENTS 36

REGIONAL PLAN ASSOCIATION THANKS THE FOLLOWING FINANCIAL SUPPORTERS OF ITS LOWER MANHATTAN WORK AND OF THE CIVIC ALLIANCE TO REBUILD DOWNTOWN NEW YORK:

ROCKEFELLER BROTHERS FUND
THE ROCKEFELLER FOUNDATION
THE FORD FOUNDATION
SURDNA FOUNDATION
CON EDISON

Introduction

An extraordinary mood of collaboration, unanimity of purpose and shared responsibly characterized the spontaneous coalescing of the civic community in the weeks and months following 9/11. In conference rooms and university classrooms, crowds of planning and design professionals, community advocates, union representatives, public officials and others came together week after week to discuss the principles and goals that should guide the planning and rebuilding process for Lower Manhattan. From this discussion a handful of coalitions and projects emerged, each with a slightly different focus or niche, but all with the goal of "raising the bar" about what to expect for the rebuilding of Lower Manhattan. Some of the most prominent groups and projects included the Civic Alliance to Rebuild Downtown New York, New York New Visions, Rebuild Downtown Our Town (R.Dot), the Labor Community Advocacy Network (LCAN) and Imagine New York, who each published reports and position statements in the fall and spring of 2001-2002 that helped to shape the direction and objectives for the rebuilding process.

The strongest and most clearly supported sentiment that emerged from this process, culled from hundreds of years of collective planning experience of the diverse group of professionals who took part in these efforts, was that rebuilding after September 11 – particularly because of the unprecedented and tragic nature of this unique challenge – needs to be unsurpassed in its public participation, transparency and accountability to the public. This was the overriding theme of civic efforts, and was in part self-actualized by the outpouring of work by the civic community that framed the planning process even before the public agency charged with overseeing the rebuilding—the Lower Manhattan Development Corporation (LMDC)—was created.

Precisely because of the outpouring of people's time and concern and dedication to the task of rebuilding in the fall and winter of 2001-2002, there were great expectations about what the rebuilding process could achieve. Specifically we wondered: what can a planning process achieve when an entire city of professionals, officials, advocates (and sometimes adversaries) unites behind one goal? The first three years of the rebuilding of Lower Manhattan provide the best case study from which to answer that question.

The Civic Alliance's September 2002 Planning Framework, which forms the basis for this retrospective report, was written as a consensus document of the Civic Alliance after a series of eight meetings each exploring an aspect of the rebuilding process in turn. It is an apt point of reference because it flows from the contributions and input of a very broad range of organizations involved in the rebuilding process for Lower Manhattan. Released in draft for the Regional Plan Association's 2002 Regional Assembly, which drew about six hundred people to discuss the content of the report, it was revised in the following months after the extensive input of the working groups of the Civic Alliance. Its thoroughly-vetted recommendations largely represented the consensus of the civic community and the high hopes and expectations for this vital planning responsibility.

"What can a planning process achieve when an entire city of professionals, officials, advocates (and sometimes adversaries) unites behind one goal?"

The purpose of this Assessment report is to evaluate the rebuilding of Lower Manhattan in light of the goals set out for it at the outset of the planning process by the civic community. It is not meant as a critique of a single agency, entity, or group of actors, but of the entire rebuilding process that has been formed from a complex interplay of people, policies, timing, politics, and tragedy. The report chooses as a benchmark the goals of the civic community because they represent a hopeful and prospective framework for the rebuilding that captures the mood and expectations of the period in which they were drafted. While some of the goals may no longer seem current, a surprising amount of the recommendations are still very relevant, and continue to guide the civic desires for the direction of the rebuilding. As this process moves forward at the third anniversary of September 11, this report highlights the successes, failures and the opportunities that still exist to realize the potential handed to us in tragedy to remake a district, city and region for the better.

Background

Regional Plan Association (RPA) offers this assessment of how the rebuilding process has measured up against the goals of the civic community for consideration and discussion by its peers in the Civic Alliance. It is intended to help guide the advocacy agenda of the civic community moving forward and to point to areas of opportunity and priority for its efforts. Following the issuance of this report, the Civic Alliance will meet to frame its policy agenda for the coming year and set goals to be met before the next anniversary of 9/11.

In preparing this report, RPA has drawn on its experience of convening and staffing the Civic Alliance since shortly after 9/11, and its extensive involvement in leading efforts to promote public participation in the rebuilding process with its Civic Alliance partners. The views expressed in the paper are those of RPA, but are influenced by its extensive experience working with the members of the Civic Alliance and by input of Civic Alliance members specifically on this report. The input and comments of the general public are also considered, gathered from the Civic Alliance's many public participation events Civic Alliance has sponsored since 9/11, such as two "Listening to the City" forums in February and July of 2002, the "How Can $1.2 Billion best Revitalize New York After 9/11?" public workshop in March 2004, and numerous public panel discussions that were hosted by different organizations as part of the "Beyond 16 Acres" series, on topics ranging from housing to green buildings to Chinatown.

RPA wishes to thank its partners in the Civic Alliance who have donated many hours of their time to promote the goal of a sustainable and equitably rebuilt Lower Manhattan and who believe in the importance of having the civic community come together and stay together to promote public participation and accountability in the process. RPA also wishes to acknowledge the hard work of the public agencies and civil servants who face the daunting task of executing the rebuilding agenda, and for their unwavering professionalism and dedication since 9/11. Specifically, the Lower Manhattan Development Corporation, the Port Authority of New York and New Jersey, the Metropolitan Transportation Authority, the City of New York and the State of the New York are to be commended for their extraordinary efforts.

Listening to the City on July 20 & 22, 2002, was sponsored by the Civic Alliance.

Photo: Jacqueline Hemmerdinger

The Civic Alliance has focused on all of Lower Manhattan below Houston Street and the relationship of this area with the larger region.

Map: RPA

Major Findings and Recommendations

The high expectations of the civic community for the rebuilding process have yet to be realized by the official policies and actions guiding the rebuilding and recovery of Lower Manhattan. While the rebuilding process has responded to several major civic-supported recommendations—in particular, restoring and expanding Lower Manhattan's transportation infrastructure and connections to the region—it has neglected many other recommended strategies. Most importantly, none of the official planning efforts to date have seriously considered the recommendation to change the program for the WTC site by introducing a more diverse mix of uses or reducing the amount of commercial office space located on the site. Other civic recommendations to diversify Lower Manhattan's economy, provide a range of housing options, and lead the City and Nation in pioneering environmental sustainability and green building design, have largely been neglected. Below, the major findings and recommendations of the report are detailed.

1 The Port Authority, New York City, New York State and the Metropolitan Transportation Authority repaired and restored Lower Manhattan's infrastructure and public spaces with unprecedented speed and efficiency. Subway and PATH service were restored and the Trade Center site was cleaned up far earlier than nearly anyone anticipated. Business owners, landlords, workers, residents and volunteers also contributed greatly to restoring Lower Manhattan as a functioning business district and residential community.

2 Several exemplary projects have resulted from the rebuilding effort and should help restore Lower Manhattan's vibrancy as they are implemented. Mayor Bloomberg's Vision for Lower Manhattan and the LMDC's selection of the Studio Libeskind Master Plan for the World Trade Center site provided the blueprints for the direction of off-site and on-site planning. The Port Authority's selection of Santiago Calatrava's inspiring design for a new PATH station and the MTA's planning and design for the Fulton Street Transit Center should change the image of Lower Manhattan.

3 The commitment to incorporate public input in the planning process, while laudable in some instances, has been uneven over time and across subject areas. In many cases public agencies have failed to follow through on public input received. While extensive opportunities were provided for public input into planning decisions for the World Trade Center site by the LMDC at the beginning of the process, the follow-through and responsiveness to that input has been less successful. One example is the overwhelming comment of participants at "Listening to the City" that plans for the World Trade Center site were too dense, too dominated by office space, and too boring. Yet an office space program of ten million square feet continues to shape the World Trade Center master plan, despite lack of funding, unsupportive market conditions and a united civic community calling for a different approach.

4 Major challenges and uncertainties underlie the current direction of planning for the World Trade Center site. The implementation of design excellence is not assured, as Libeskind's Master Plan has been stripped and design guidelines languish in negotiation.

- Despite economic uncertainty, high office vacancy rates, and reduced insurance money available for rebuilding, plans to build 10 million square feet of office space continue to define the World Trade Center Master Plan. Major phasing and implementation questions are raised by this approach.

- The latest General Project Plan (GPP) lacks the detailed attention to the public realm of the Libeskind Master Plan, the thorough integration of memorial elements with the entire site, or sufficient detail to express a common design theme. Implementation of these essential elements will thus fall to the WTC Commercial Design Guidelines for the site, which are being stalled by negotiations between the developer and public agencies, and have yet to be vetted with the public.

5 Economic initiatives to date have not supported the diversification of Lower Manhattan's economy, nor do they promote a range of housing options that would encourage a socially, economically and racially diverse residential community.

- The emphasis of public policies towards creating large amounts of office space in Lower Manhattan does not offer sufficient flexibility to support the growth of a more diverse array of sectors of Lower Manhattan's economy. Successful commercial business districts must provide a wide range of amenities – including attractive housing, cultural institutions, civic spaces and public facilities – to attract a diverse and talented workforce. And in the economic downturn following 9/11, no public policies have specifically outlined a strategy for the immediate creation of jobs.

- While Lower Manhattan added over 6,500 units of housing below Canal Street since the year 2000, little or none of it was affordable to low and moderate income families. The Liberty Bond program has contributed to the creation of market-rate and luxury housing, but has created no affordable housing in Lower Manhattan. Only $50 million in CDBG funds has been announced by the LMDC to create 300 units of middle-income housing in Lower Manhattan. Existing affordable housing from the Lower East Side to Chinatown to Tribeca is at risk of being lost to expiring public subsidies and gentrification pressures.

6 Efforts to build Lower Manhattan's civic amenities to create a more attractive and livable community, as articulated in the Mayor's "Vision for Lower Manhattan," are lagging. The importance of implementing civic amenities, open space and waterfront access improvements throughout the district, and better connecting the diverse communities of Lower Manhattan is key to creating a vital 24/7 community and an improved quality of life. While off-site planning studies to this end are underway or completed, no funds have been committed to their implementation, even as the remaining $869 million CDBG funds are being allocated to other priorities.

7 The success of the "Reflecting Absence" memorial design is greatly dependent on integration with the overall master plan for the site, and logistical, funding and maintenance issues that are in development. The cultural program for the site, while promising, is also highly dependent on funding and implementation issues, and has not benefited from sufficient public input. While public response to the selected memorial design can best be described as lukewarm, it satisfies some parties' hope of reconnecting the memorial site with the surrounding neighborhood by creating an at-grade plaza. Logistical, programmatic, maintenance and sustainable design issues will largely determine whether the memorial can succeed as a public place that simultaneously provides a meaningful tribute to those who lost their lives and can accommodate millions of visitors a year.

8 While individual buildings on the WTC Site will meet a minimum threshold of environmentally sustainable design, they will be upstaged by other projects in the City that are demonstrating greater levels of environmental innovation and sustainability. The creation of WTC Sustainable Design Guidelines by the LMDC and the Port Authority is commendable; but they direct WTC development to follow, rather than lead City-wide efforts to implement sustainable design. The LEED[1] Gold-rated Solaire residential building in Battery Park City represents a higher standard of environmental design than the highest level aimed for in the World Trade Center Sustainable guidelines. Also, the planned Bank of America building at One Bryant Park will aim for the first LEED Platinum rating for a high rise building, setting a nationwide example.

Recommendations

Significant opportunities still exist to achieve the model 21st Century City envisioned by the civic community after 9/11, which would promote a sustainable and equitable economy throughout Lower Manhattan over the long term. This report offers the following recommendations for consideration by policy makers, the civic community and the public.

1 Improve opportunities for civic and public participation in several critical areas of the rebuilding process by implementing the following steps:

Release draft **WTC Design Guidelines** to the public for input; Designate an administrator of the guidelines and a review board for proposed changes. Set a target date for the design guidelines' adoption. This recommendation should be implemented by the LMDC in partnership with the Port Authority.

Develop a draft timeline for the allocation of the remaining **CDBG funding**, including a list of all projects and initiatives under review to be funded. Specify guidelines for how outside groups seeking funding may apply to receive the remaining funds. This recommendation should be implemented by the LMDC, in partnership with City agencies.

Open the process for developing and refining the **cultural program** for the WTC site to public input, in order to test ideas, gather feedback, and build broader support, understanding and buy-in for these important and promising activities on the site. This should be implemented by the LMDC.

Design a process for public review of the refined programmatic and physical plans for the **WTC Memorial** design, when it is completed by consultants. This process should be conducted by the LMDC.

2 In light of limited funding for the rebuilding of the WTC site, an uncertain economic outlook and sluggish office demand, reexamine the leaseholder agreement and the program for the World Trade Center site, considering available public and private resources for development.

Then, develop a strategy for World Trade Center Tower Footprints 2, 3, 4, and 5 to more accurately reflect market demand and potential phasing. Three alternative strategies are recommended in this regard:

Explore **different program options** for these sites, such as housing, hotel/hospitality, and an expanded civic and cultural program, or other uses that could be developed right away.

Immediately develop a plan for **building tower "pedestals"** that would house retail and possibly civic or cultural uses in the interim period between now and when office space demand can support the development of the site.

Work with artists to create **temporary installations of public art** on the building sites, similar to the "Art on the Beach" program of the 1980s that originally inhabited the landfill that now is home to Battery Park City.

These strategies must be considered jointly by the Port Authority, LMDC, City of New York and Silverstein Properties.

3 Develop a plan to meet Mayor Bloomberg's 2002 target of creating 2,000 units of housing affordable to low- and middle-income households in Lower Manhattan. The City should work jointly with the LMDC to achieve this goal.

4 Broaden Lower Manhattan's economic development strategy to grow new sectors and diversify Lower Manhattan's economy.

In addition to building high-end, high-performance office space, Lower Manhattan's economic development strategy should remain flexible to support the growth of broad sectors that would contribute to a more **sustainable, diverse and equitable economy**. Part of this strategy should be to provide adequate job training in sectors with potential for growth, and to use public policies to promote the creation of career-oriented jobs.

This strategy should be addressed jointly by the City, the LMDC and Lower Manhattan business industry leaders.

5 Place greater priority on creating civic amenities by expediting off-site planning studies, seeking public input, and estimating implementation costs.

A **street management plan** for Lower Manhattan is essential to connecting its diverse neighborhoods, serving businesses, reducing the risk of terrorist attacks, improving the quality of the public realm and promoting pedestrian safety and the economic health of Lower Manhattan. The NYC Department of Transportation's Street Management study, the Chinatown Circulation Study, the Fulton Street Corridor and other studies affecting Lower Manhattan's streets and sidewalks should be coordinated, and their recommendations considered for funding by the LMDC and the City.

Neighborhood planning studies such as Fulton Corridor, Chinatown, East River Waterfront and Greenwich Street South must be coordinated and opened to public input in the coming months. Cost estimates should be developed for their implementation so they may be considered for CDBG funding.

6 Set higher targets for environmentally sustainable design at the World Trade Center site, adopting a more holistic approach that ties together commercial buildings, public open spaces, memorial and cultural elements and transportation.

Work with **developers experienced in green building design** to overcome resistance to higher upfront costs, or use public subsidies to offset upfront premiums.

This goal must be addressed by the LMDC, the Port Authority, and Silverstein Properties in consultation with architects, developers and consultants.

WTC Seven is rising quickly just north of Ground Zero.

Photo: RPA

Economic Development

In 2002, the Economic Development Working Group of the Civic Alliance positioned the challenge of revitalizing Lower Manhattan's economy in the context of integrating and strengthening its three roles as a "Global Center", "Regional Hub" and "Diverse Community." After two years and billions of dollars spent in studies, investments and initiatives, completed and planned transportation improvements provide optimism for enhancing Downtown as a regional hub. Some of these transportation improvements and plans for new office development are also geared toward restoring Lower Manhattan's role as a center for global services. However, these efforts face a more uncertain outcome, in large part because of structural changes in financial services, continued pressures for firms to decentralize operations, and the unpredictable pace of national and international demand. The goal of maintaining a diverse community is also in doubt. So far, residential subsidies have helped Lower Manhattan to resume its rapid growth in market rate housing, but appear to be making it more difficult for lower income residents to remain in the district.

Despite a recent reversal of growing office space vacancies and the continuation of modest economic diversification that was underway before September 11, the district's recovery remains fragile in the context of an uncertain regional economy and several more years of intensive construction activity. Lower Manhattan is still struggling to regain the jobs it lost due to the terrorist attacks, the stock market decline, and the bursting of the dot.com bubble. The finance industry, critical to the economy of Lower Manhattan, is still 54,000 jobs below its 2000 level.[1] Aided by tax free financing and public incentives, Lower Manhattan has 6.3 million square of commercial office space planned or under construction along with nearly 13 million square feet of vacant space. High-end residential development and conversions of office space to apartments have been strong, but the income and racial diversity of residents is likely to decrease as little affordable housing is added and the expiration of longstanding subsidies push substantial numbers of apartments out of the range of affordability for most New Yorkers.

This chapter provides updated findings of basic economic statistics for Lower Manhattan and evaluates the status of the Civic Alliance's 2002 recommendations, which emphasized the importance of integrating Lower Manhattan's three important roles as:

- A **Global Center** that supports the international competitiveness of New York City and the metropolitan area in industries ranging from financial services to tourism;

- A **Regional Hub** that connects the economic assets of the area and supports local economies through the region; and,

- A **Diverse Community** with a local economy serving over 100,000 residents and thousands of businesses from Battery Park City to Wall Street to Chinatown to SoHo.

The progress of repairing and expanding Lower Manhattan's transportation infrastructure and promoting civic and cultural amenities—two important components of the Civic Alliance's recommended economic development strategy—is detailed in the transportation and civic amenities chapters of this report, respectively.

Manhattan Office Space 2Q 2004

	Total Inventory (sq. feet)	Availability Rate (percent)	Weighted Avg. Asking Rental Rate	Under Construction (sq. feet)
Midtown	190,749,320	12.6	$50.65	1,280,600
Midtown S.	122,480,936	12.2	$29.17	120,000
Downtown	**91,060,695**	**14.2**	**$32.00**	**1,674,695**
Total Manhattan	404,290,951	12.8	$39.81	3,075,295

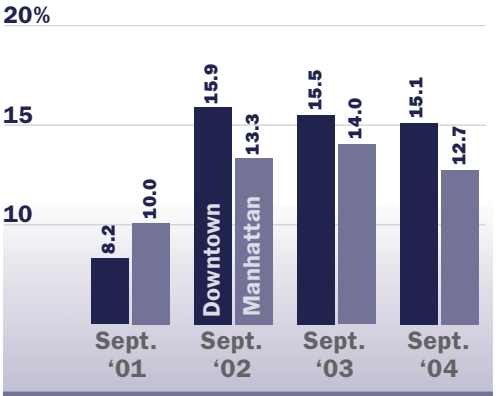
Source: Newmark Office Market Report 2Q04

Updated Findings

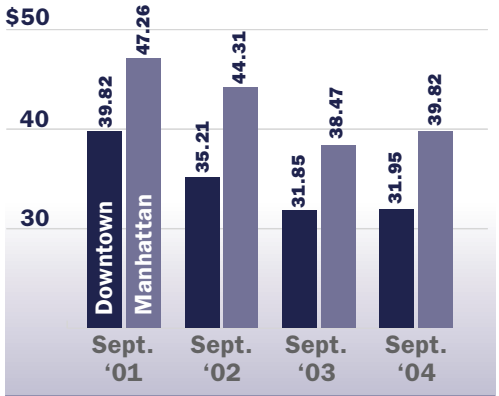
Employment

- Lower Manhattan's economy is still heavily dependent on finance and securities jobs, though some diversification of sectors that began before 9/11 is continuing. While the share of private employment in the finance, insurance and real estate sectors (FIRE) decreased from 57% to 52% from 1996-2003 and employment in professional services grew from 28% to 34%, the FIRE sectors still accounted for 74% of private sector wages in

Lower Manhattan Office Market Snapshot



Total Availability Rates



Weighted Average Asking Rental Rates ($ per square foot)

Lower Manhattan in 2002,[2] closely linking the health of the district as a whole to the ups and downs of the financial industry.

- New York City's economy turned a corner in the last year, but private employment remained 182,000 jobs below its 2000 peak.[3] City-wide, New York added 21,100 new jobs in the first quarter of 2004, exceeding U.S. growth for the first time since the third quarter of 1999.[4] New York City's unemployment rate, though it decreased, remained high at 8.1%. The increase in jobs may have little effect on Lower Manhattan's economy, as jobs in the financial sector decreased by .7% in the last quarter while city-wide jobs grew 2.5%.

Office Market

- Lower Manhattan is moving aggressively to restore the office space lost on 9/11 with 1.7 million square feet under construction, up to 10 million additional square feet planned at the World Trade Center site, and 2 million square feet in a new headquarters for Goldman Sachs to be built in Battery Park City with $1 billion in Liberty Bonds. While the phasing for towers 2, 3, 4 and 5 will likely be determined by market demand, the completion of World Trade Center 7 and the Freedom Tower will bring 4.3 million square feet of office space online, and could raise overall vacancy rates in the district if job growth does not keep pace.

- The Downtown office market continues to lag behind the rest of Manhattan, despite moderate signs of improvement in late 2003 and early 2004. Though Lower Manhattan experienced three quarters of positive office space absorption from late 2003 through mid 2004, bank consolidations released almost a million square feet of space back onto the market in August 2004. Lower Manhattan's availability rate in September 2004 remained only slightly lower than the previous year at 15.1%, with asking rents at $31.96 per square foot, compared to $51.51 in Midtown and $39.82 in Manhattan overall. In comparison, the Hudson River Waterfront in New Jersey had 19 million square feet of total inventory in the second quarter of 2004, a 14.8% vacancy rate, and average weighted rents of $27.71 per square foot.

- Major real estate transactions in the last year reveal that a greater mix of sectors, particularly non-profit and legal firms, are attracted to Lower Manhattan office space by government incentives and low rents. The top three real estate transactions in 2003 included the United Federation of Teachers, HIP – Health Insurance Plan of New York, and the law firm of Caldwalader, Wickersham & Taft, who acquired blocks of office space of 450,000 square feet or greater. New leases were also signed by prominent financial services firms like Goldman Sachs, OppenheimerFunds and AON Risk Services. It is unclear whether the diversification of tenants represents the growth of new industries tied to Lower Manhattan, or simply short-term bargain-hunting by companies seeking low-cost office space.

Lower Manhattan Neighborhood Profile 2000

	Total	Financial /Historic	WTC Vicinity	Battery Park City	Tribeca	SoHo	S. Street Seaport	Lower E. Side	Chinatown
Population:	156,086	2,350	1,525	7,951	12,121	9,729	8,499	21,359	92,552
Dwelling Units:	68,649	1,460	985	5,382	6,008	5,950	4,072	10,178	34,614
Median Income:		$90,325	$87,575	$136,800	$123,425	$66,870	$49,380	$24,720	$23,885

Source: New York City Department of City Planning

Luxury rental apartments are being converted from former office space or built anew.

Photos: RPA

Housing

- In the year 2000, over 150,000 residents lived in Lower Manhattan below Houston Street, exhibiting a great diversity of income levels and neighborhood characteristics. Though many residents around the World Trade Center were displaced by 9/11, returning and new residents have brought occupancy levels back to normal and government policies and programs have helped grow Lower Manhattan's residential population to rise above 2000 levels.

- Lower Manhattan neighborhoods face housing pressures as a result of the lingering economic downturn following the tragedy in addition to gentrification pressures that existed before 9/11. Many privately-owned subsidized housing units that enable diverse populations to remain in these neighborhoods are at risk of being converted to market-rate units as Mitchell Lama programs expire, Section 8 vouchers are reduced, and other subsidies set up in the 1970s end.

- Over 6,500 new housing units have been added to Lower Manhattan below Canal Street since 2000, partly due to public policies promoting housing development instituted before and after September 11. The Liberty Bond program, created after 9/11, authorized the use of $1.6 billion in triple-tax exempt financing for multifamily residential projects in Lower Manhattan and has already provided $1.06 billion in financing to 17 residential buildings south of Chambers Street. Conversions of Class B and C office buildings to residential, enabled by the 421g Residential Conversion program of 1995, have also played a strong role in Lower Manhattan's residential growth. Since 2000, approximately 4,946 new units have been created through conversions and another 4,036 units are planned for conversion.

- Little or no low, moderate or middle income housing is being created in Lower Manhattan as a result of the public subsidies for new housing development, despite Mayor Bloomberg's target of creating 10,000 new units of housing using Liberty Bonds, 20% of which would be affordable to people who cannot pay market rates.[5] Instead, Liberty Bonds authorized by New York City allow developers to satisfy an affordable housing requirement by paying a 3% development fee that helps subsidize affordable housing in other communities. To date, the fees from four Lower Manhattan residential projects are helping to create 390 units for low and middle-income tenants in the Bronx and Upper Manhattan.[6] Liberty Bonds authorized by New York State require that developers set aside 5% of their units for people earning up to 150% of the area median income, at rents determined by the developer.

- The LMDC has proposed the use of $50 million of the Community Development Block Grant (CDBG) funds in their Partial Action Plan to create 300 units of housing affordable to families making no greater than $85,000 a year. Currently the LMDC is considering public comment on this plan in preparation for submission to the U.S. Department of Housing and Urban Development (HUD).[7]

- Additional programs to improve neighborhood parks, streetscape conditions, transportation links, and the creation of the Millennium High School are helping to make Lower Manhattan communities more attractive to new residents. However, the supply of child care, an essential component of helping residents maintain stable employment, remains limited in Lower Manhattan. A recent report highlighted the absence or limited supply of early education and childcare programs, particularly in Battery Park City and Chinatown and the lack of affordable childcare throughout Lower Manhattan.[8]

Rebuilding Funds

- Approximately $20.4 billion in federal funds were allocated to New York City in the aftermath of 9/11 for recovery from the tragedy. According to the Independent Budget Office, approximately half the funding has been received and used while most remaining funds have been allocated to long-term rebuilding efforts that will be spent as specific projects move forward.[9] Of the $9.7 billion in funding directed towards long-term rebuilding, the largest portion ($4.55 billion) is for transportation improvements, in addition to $2 billion in tax credits that may also be converted for use on a rail link to Long Island and Kennedy Airport. One portion of unallocated funding is $869 million in CDBG funds, which is being eyed for many competing uses.

New & Planned Housing Conversions since 2000

	Conversions		New Construction			
	Completed since 2000	Planned	Completed since 2000	Planned or Proposed	Less Likely	Total
Financial District & Seaport	4,261	3,442	156	3,094	1,290	12,243
Battery Park City	–	–	948	2,440	–	3,388
Tribeca	685	594	510	2,216	120	4,125
Total	4,946	4,036	1,614	7,750	1,410	**19,756**

Source: New York City Department of City Planning, August 2004

Policy Assessment

The economic development strategy of the lead agency for rebuilding, the LMDC, has been characterized by a strong commitment to restoring the office space and transportation links lost on 9/11, and enhancing, expanding and modernizing these facilities in the process. At this early stage in the game it is difficult to determine the effect of such measures on Lower Manhattan's economy, which has been slow to recover. High profile commitments to build new transportation projects may be having an effect on stabilizing the office market, however. Despite the emphasis on transportation infrastructure and new office space, no public policies have specifically outlined a strategy for the short-term creation of jobs, nor aggressively promoted the diversification of Lower Manhattan's economy to strengthen the district's long term competitiveness and protect it from the swings of financial industry cycles.

A wild card in Lower Manhattan's future is the outcome of development for the World Trade Center site. If employment growth proceeds slowly, office space at the World Trade Center will contribute to Lower Manhattan vacancy rates, drive rents down further, and create a vacuum in an important part of the district. The new office buildings may also have difficulty attracting tenants because of terrorism concerns. This argues for a reconsideration of the amount and timing of office space development, and also increased attention and adequate resources to ensure the success of the site's non-office components, such as the design, implementation and management of public open spaces, the memorial, the cultural program, the interim uses of Tower Footprints 2, 3, 4, and 5, and the design, mix and strategy for retail.

The failure to incorporate an affordable housing component in post-9/11 residential subsidies will limit the future diversity and vitality of Lower Manhattan communities by failing to provide housing options to a range of income levels and professions. Moreover, publicly subsidized financing, in the form of Liberty Bonds, has underwritten the creation of market-rate and luxury housing that has contributed to building a community that is exclusively upper-income in the financial district and fringes of the civic center. The residential grant program, intended to attract residents to Lower Manhattan by subsidizing rents for 1-2 years has provided additional incentive to landlords to raise rents in a residential market that has been on the upswing since 2002.

Recommendations

While the rebuilding of the World Trade Center is underway and major transportation projects move through environmental review, approximately $869 million in flexible CDBG funds await allocation.

Numerous planning studies, to be described in the Civic Amenities chapter, have been funded by the LMDC, though they have yet to be shared with the public. The implementation of these plans, in addition to the creation of affordable housing in Lower Manhattan, are logical candidates for the allocation of remaining resources. In addition, hundreds of proposals for economic development projects, cultural and educational activities have also been submitted to the LMDC for this funding, though no process exists for public review of these proposals or to learn of their status. As pointed out by a recent Good Jobs New York report, a clear process must be instated for the remainder of these funds, outlining procedures for reviewing existing applications, guidelines for new ones, and a timeline for decision making.

The need to rebuild Lower Manhattan's transportation infrastructure and strengthen the district's ties to the City and the rest of the Region emerged as one of the most strongly supported goals for the rebuilding process shortly after 9/11. The $4.55 billion in federal funding secured for Lower Manhattan transportation projects has enabled work to move forward on key projects that will correct long-standing deficiencies of Lower Manhattan's century-old transportation system, and create new architecturally significant points of arrival and civic landmarks worthy of Lower Manhattan's importance as a center of world business. As these projects move forward, attention must also be paid to the competing demands of pedestrians, autos, and delivery trucks on Lower Manhattan's narrow and historic streets, compounded by the frequent disruptions of utility work. Finally, to compete with midtown as a premier office district, Lower Manhattan's access to the region's workforce and airports must be improved.

Updated Findings

Restoration of Existing Services

Public transportation agencies worked together after September 11 to restore essential transportation links serving hundreds of thousands of passengers a day. Within months after the attacks, service on the 1/9 and N/R subway lines was restored by the MTA. The portion of West Street that runs alongside the World Trade Center was rebuilt as a temporary six-lane roadway between Liberty and Vesey Streets by New York State DOT, which also restored two temporary pedestrian bridges over West Street at Rector and Vesey Streets. The Port Authority completed extensive repair to the PATH tunnel under the Hudson River, installing new tracks, electrical wiring and signals. A spare and elegant temporary World Trade Center PATH Station reopened in November 2003, restoring PATH routes from Lower Manhattan to Hoboken and Newark that existed prior to September 11. New York City DOT is leading a Lower Manhattan multi-agency task force to coordinate traffic and street repairs with multiple transportation restoration projects.

The MTA's planned Fulton Street Transit Center

Image: Metropolitan Transportation Authority

Major Projects Underway

World Trade Center Permanent PATH Station

The Port Authority has hired renowned architect Santiago Calatrava to design a signature transportation hub at the World Trade Center site that will provide connections between New Jersey PATH and the New York City Subway and will serve over 115,000 commuters a day when it opens in 2006. Preliminary plans for the project depict a spacious, light-filled, modern facility crowned by an above-ground station house of Calatrava's design. Functionally, the new station will improve upon its predecessor by providing five tracks and four ten-car platforms, and underground connections to the 1/9, E, R, and W subway lines, and will connect east to the new Fulton Street Transit Center via a Dey Street passageway. The new station is also intended to correct the former cramped corridors, low ceilings, crowded stairwells and poor lighting and ventilation that existed in the old WTC PATH station.

Outstanding Issues: PATH

- An **underground north-south pedestrian passageway** to Liberty Plaza is being considered for the station at the cost of $81 million. The need for this passageway is questionable, as underground north-south access was not provided before September 11 and its absence was not recognized as a problem. Furthermore, the passageway, which would be lined with retail, will encourage underground movement in an area where street level pedestrian activity is desired. Pedestrian crowding at the street level could be more effectively and less expensively dealt with by widening sidewalks, which the PA has proposed as an option. Finally, the City of New York has objected to the encroachment on Liberty Plaza that a remote entrance to the PATH station would

require, which in combination with the aforementioned reasons suggests that the Liberty Plaza Passageway option should be discarded.

- The construction of the Permanent PATH station has raised several issues for the **Section 106 Historic Preservation** process. In August 2004, the Coalition of 9/11 Families, one of the consulting parties to the Section 106 review, filed a lawsuit seeking an injunction against any work at the site because of objections to the infringement of PATH platforms over the northern and southern tower footprints. How to preserve access to the truncated box beam column bases that delineate the WTC Tower footprints must be resolved before the PATH station is built.

- The Permanent PATH station will contain a **significant retail component** to replace the retail that formerly existed in the concourse level of the World Trade Center and to generate revenue for the Port Authority. Details of the specific mix of above ground and below ground retail were not included in the draft Environmental Impact Statement released in July 2004, and should be made public as soon as possible. The possibility of locating too much retail underground raises concerns for its impact on above ground retail and street vitality, as well as conflicts with the memorial.

The temporary WTC PATH Station (left); **The permanent WTC Transportation Hub to open in 2006** (right).

Images: RPA Photo, Port Authority of New York and New Jersey

Fulton Street Transit Center

The MTA has released preliminary plans and renderings for the Fulton Street Transit Center, a new facility that will bring together and organize the current labyrinth of nine subway lines that lie beneath Fulton Street between William Street and Broadway, plus provide connections to subways and PATH at the World Trade Center station. Like the Permanent WTC PATH station, the Transit Center will have an above-ground, architecturally significant station house that will allow sunlight to illuminate the station, down to the track level where possible. The cost for the project is estimated at $750 million, with construction beginning at the end of 2004 and running through 2007.

Immediate concerns were raised over the fate of the Corbin Building at 11 John Street, an early skyscraper built in the 19th Century by architect Francis Kimball. The MTA has committed to preserving the building by incorporating it into the design of the new station through adaptive reuse.

As the Fulton Street Transit Center will provide the anchor of a revitalized Fulton Street, as well as the main generator of pedestrian traffic, it is essential the MTA work in lockstep with the LMDC's Fulton Corridor planning team to ensure that plans for this important street are closely coordinated.

South Ferry Station Redesign

To correct the long standing deficiencies of this one hundred-year-old station, the MTA is moving forward to renovate and straighten the curved tracks and platform of the South Ferry station, which currently requires passengers to move to the first five cars of the ten-car subway train to disembark. This outdated configuration, which slows service along the entire 1/9 line will be improved to accommodate more trains per hour, increase service reliability along the entire line, comply with ADA regulations and provide safer platform conditions and greater capacity for passenger movement within the station. The new station will also provide a free transfer to the R and W subway lines, which did not exist previously. The project is estimated to cost $400 million and should be completed by the end of 2007.

Route 9A/West Street Project

New York State Department of Transportation (NYS DOT) is exploring several options for the redesign of West Street in the vicinity of the World Trade Center site. Currently, it is configured as a temporary six-lane roadway. The options include either a short

tunnel bypass or an at-grade roadway. The bypass would create a below-ground four lane covered roadway from Liberty or Cedar Streets to Vesey Street for through traffic, leaving four lanes for local traffic at grade and increased landscaping, green space and sidewalks near the World Trade Center Memorial and the World Financial Center. This alternative would cost approximately $860 million and take three years to build. In contrast, the At Grade Alternative would rebuild the roadway for eight lanes of traffic, landscaped with a planted median and other features, and would cost $175 million and up to two and a half years to construct. The final option, the No Build Alternative, would essentially leave the roadway in its present configuration, with some upgrades to provide for the road's permanency, at a cost of $135 million and a one and half years construction time.

Comparison of select characteristics of Route 9A Project Alternatives

		No Action	At Grade	Short Bypass
Transportation	**Vehicle Hours of Delay** (AM and PM, peak hour)	1225	563	366
	Vehicle/pedestrian conflicts (at AM peak hour)	7700	8300	4800
	Volume in front of the Memorial (AM peak hour)	5595	5595	2398
	Pedestrian bridges needed	yes	highly likely	unlikely
Construction	**Duration** (in years)	1.5	2 to 2.5	3
	Amount of excavation (in cubic yards)	40,000	40,000	180,000
	Cost (in millions)	135	175	860

Source: Route 9A Project SEIS

The Supplemental EIS (SEIS) released in June 2004 provided traffic projections for each of the alternatives that suggest the At Grade option provides the most cost effective means of reducing traffic delay. For instance, the At-Grade alternative costs only $40 million more than the No-Action alternative, yet it cuts the vehicle hours of delay (VHD) during peak periods by over half. In contrast, the Short Bypass costs $685 million more than the At-Grade, and only reduces VHD of the At-Grade option by an additional third. At the June 2003 public hearing for this project, respondents almost universally opposed the Short Bypass alternative because of its excessive cost, concerns about safety at the tunnel portals, and concerns about the cumulative effects of multiple construction projects in Lower Manhattan over the next decade. While Governor Pataki originally supported the Short Bypass option, the Downtown Express reported in July that he would consider whatever option emerges as recommended in the final SEIS.

Long Island/ JFK Airport Access

A study led by the LMDC exploring options for best connecting Lower Manhattan to Long Island and JFK Airport recommended the construction of a new tunnel under the East River at the cost of $6 billion, which could be built between 2007-2013. This option was preferred over an alternative that would use the existing East River Montague Tunnel, which is currently used for M and R subway service. The Montague option would be constrained by existing subway service, reducing its potential for offering frequent commuter and airport service without impacting existing subway riders.

A new subway tunnel under the East River has the potential to provide a broad range of benefits to a great number of transit riders, if designed, planned and financed correctly. Regional Plan Association encouraged the LMDC and its partners to consider options that would allow for the eventual extension of the Second Avenue subway to Brooklyn, and to discard options that would negatively affect existing subway service. Both of these considerations were reflected by the study's results, which recommended an option that fit such criteria.

Moving forward, a draft Environmental Impact Study will explore options for service, alignment, station locations, cost and other considerations. The goal of this phase of study should be to find options that would maximize the tunnel's utility for connecting Lower Manhattan to Long Island and JFK Airport while providing additional capacity to the transit system in the process. This may be done by a) locating a stop in Downtown Brooklyn; and b) allowing for through service northwards into Manhattan, rather than terminating service at the World Financial Center.

Securing funding for this project is a key concern. In addition to $400 million set aside in the MTA's 2005-2009 Capital Program for this project, $2 billion in tax credits for businesses should be converted to tax credits for infrastructure, understood to be used for this project. LMDC's remaining $840 million in CDBG funds have also been suggested for the project, which the Civic Alliance and the Labor Community Advocacy Network have opposed, because of competing, more urgent economic development and planning initiatives in Lower Manhattan that could benefit from the cash grants.

Managing the curb space of Manhattan's narrow streets will be a focus of the DOT's Street Management Program.

Photo: RPA

Second Avenue Subway

The Second Avenue Subway would provide important benefits to Lower Manhattan by reducing overcrowding on the Lexington Avenue line used by East Side residents and Metro North riders and by speeding up, and potentially offering a route to Jamaica and JFK airport by extending a full-length Second Avenue Subway from Lower Manhattan through to Brooklyn and Jamaica and connecting to the Air Train.

Though engineering for the project is moving forward with construction scheduled to begin at the end of 2004, the MTA's four-phase approach to building the Second Avenue Subway puts the Lower Manhattan portion last, requiring up to 20 years to complete. Acceleration to gain its benefits sooner will require aggressive actions to seek added funding.

Street Management

NYC DOT has launched a multi-year Street Management Program to resolve the competing demands placed on Lower Manhattan streets by its many and various users **(Figure 1)**. In the first year of the program, NYC DOT is working with its consultants to build data bases, traffic models, and GIS tools to more effectively manage curb space, parking regulations and street closures in Lower Manhattan. Some issues that have been identified for the study include: managing the demands on street curbs by enforcing double parking restrictions, truck idling, and managing black car queues; ensuring cross-town automobile movement and penetration of the financial district and security zones; and improving the performance of existing pedestrian zones, some which have been created for security reasons. After preliminary data collection and analysis is concluded, the study will move forward with a series of pilot programs to test various time-of-day restrictions, curb regulations, traffic management and physical redesign measures for improving circulation and balancing the needs of different users, including pedestrians. NYC DOT will seek funding from the LMDC for up to four more years of the program.

Buses

Bus parking and the presence of idling buses continue to pose a problem in Lower Manhattan by polluting the air, obstructing views and clogging streets and curb space, particularly in Chinatown where coach buses congregate near Forsyth Street and on Trinity Place in the Financial District. The LMDC's Chinatown traffic and circulation study has proposed one solution to the problem by redesigning a plaza near Forsyth Street to better accommodate bus queuing, passenger pick up and drop off.

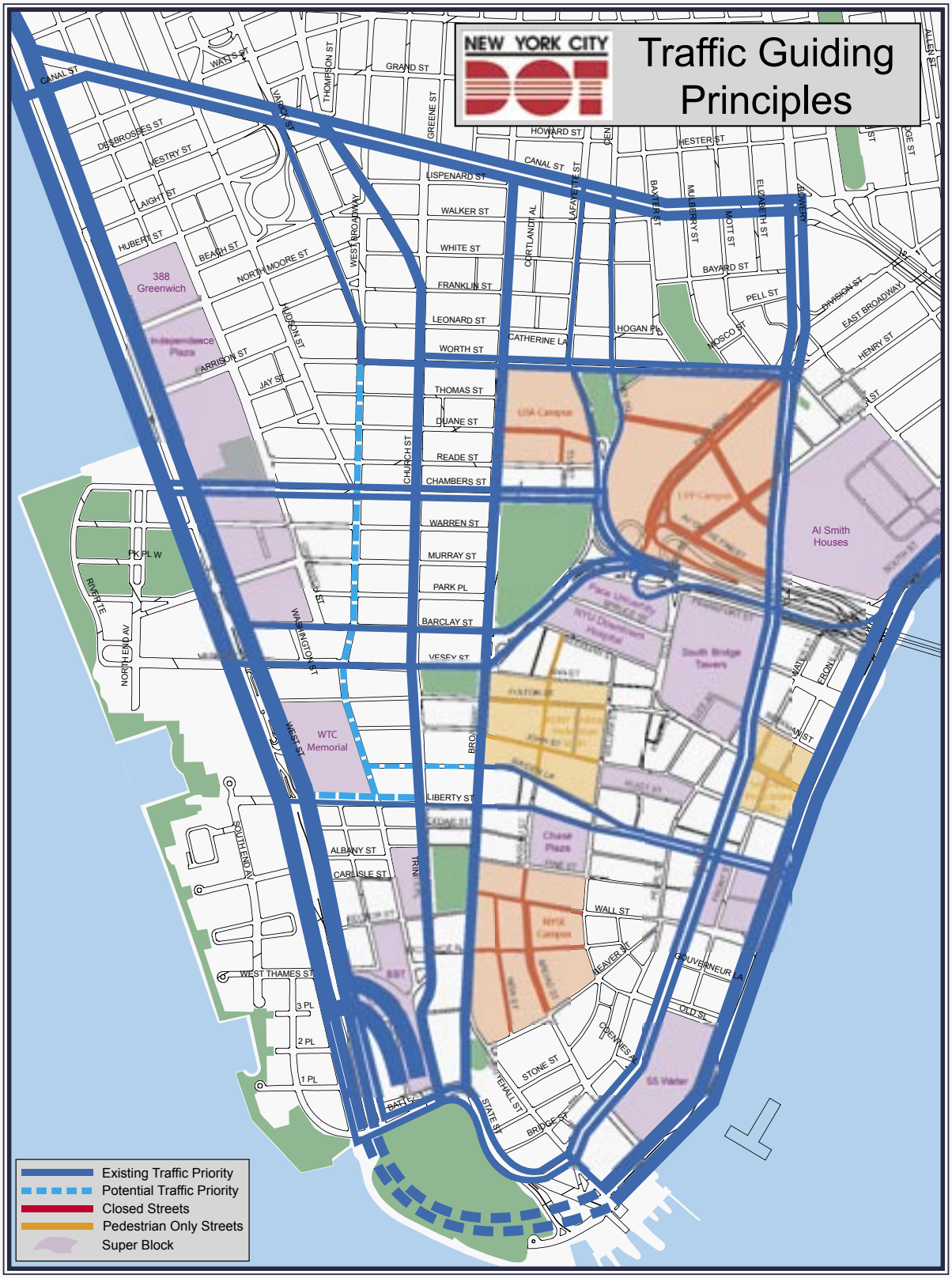
There are currently plans to locate a bus storage area at the World Trade Center site in the underground space south of Liberty Street, on the site of the soon-to-be-deconstructed Deutsche Bank building. This space could accommodate the tourist buses anticipated to visit the memorial, though planners are struggling with options for locating the ramp to this underground space in the vicinity of Liberty Street and how it should relate to the physical design for the World Trade Center site, West Street, and east-west circulation demands. The loading and unloading of passengers before buses proceed to the garage underground may take place on Greenwich Street, which could obscure views of the World Trade Center Memorial from the east.

Policy Assessment

More than any other aspect of the rebuilding process, there is broad support for the goal of enhancing Lower Manhattan's transportation infrastructure and improving access between the district and the larger region. While federal disaster funding has enabled numerous subway and PATH restoration and station renovation projects to move ahead, more ambitious capital projects, like the LIRR/JFK Airport Access project, lack complete funding. While the LIRR/JFK project may be worthwhile if designed correctly, it must meet the criteria of not impacting existing subway service, being designed to accommodate eventual extension of the Second Avenue subway, providing a stop in Downtown Brooklyn, and providing through service from Lower Manhattan north. Moreover, the financing of the project should not be diverted from other priority transportation projects that are already underway.

An essential component of improving the ease of moving around Lower Manhattan is improving the pedestrian experience. Inextricably linked to the physical design and condition of streets, sidewalks and the management of vehicles, solutions to the poor pedestrian environment are only slowly beginning to emerge. The DOT's street management study will address pedestrian conditions by focusing on regulating street curbs and by exploring how streets closed to auto traffic because of security risks can more effectively serve pedestrians. LMDC's Fulton Corridor study also aims to improve pedestrian circulation by providing adequate sidewalk width, but must balance this goal with other bus, automobile and delivery needs on Fulton Street. Their efforts are akin to solving a puzzle of moving parts, where the needs of pedestrians, auto, and other users must be balanced with each other.

Figure 1: Department of Transportation Traffic Guiding Principles



Source: NYC Department of Transportation

The Civic Alliance memorial committee's recommendations of July 2002 focused on the need to integrate the yet-unselected World Trade Center memorial design with planning for the entire site. At the time of the committee's recommendations, preliminary schemes for the site were about to be released that would leave empty placeholders for the eventual memorial. The committee expressed concern for this approach and recommended the immediate launching of a memorial design competition and planning process that would be closely linked by key coordination points with master planning for the entire site.

Updated Findings

Memorial Competition

The LMDC's World Trade Center Memorial Competition was launched in April 2003 and resulted in the selection of Reflecting Absence by Michael Arad and Peter Walker in January 2004, a scheme that represents the Twin Tower footprints with two sunken pools of water, interrupting an at-grade plaza of high-canopied trees. The earlier version of this design was chosen by a thirteen-member jury from a pool of 5,201 blind entries submitted from 63 countries across the globe, and narrowed down in a second phase of the competition to eight finalists whose entries were exhibited at the World Financial Center Winter Garden. The jury was largely insulated from outside influence following initial consultations with select groups of stakeholders, including victims' family members and Lower Manhattan residents, and the guidance of a memorial mission statement and program that benefited from public review. Following the selection of the final design, all 5,201 memorial competition entries were posted online.

Since the selection of Reflecting Absence, New York-based architecture firm Davis Brody Bond has joined the memorial team as associate architects for the memorial. A further refined memorial design is expected in 2005 following the clarification of programmatic and logistical issues for the memorial. Draft sustainable design guidelines are also being developed specifically for the memorial as they have been for the commercial buildings on site. In February 2004, Mayor Bloomberg and Governor Pataki announced the creation of a World Trade Center Site Memorial Foundation to raise funds for the construction and long term operation of the memorial, but have yet to name a chairperson for the foundation.

Section 106

Pursuant to Section 106 of the National Historic Preservation Act, the lead public agencies for projects at or around the World Trade Center site, such as the LMDC, the Port Authority and the Federal Transit Administration (FTA) are coordinating with each other and with state and national historic preservation agencies to minimize adverse impacts on historic elements that may be affected by the rebuilding of the World Trade Center site and its surrounding area. The relationship of the agencies and the process is formalized in a Programmatic Agreement signed in April 2004 after the WTC site was found eligible for the National Register of Historic Places, and is urgent because construction activities will take place on and above many historic remnants. The LMDC has convened a group of consulting parties representing different interests to provide guidance on how to minimize impacts to historic resources and respond to challenges that arise in this regard.

- In response to the input of the consulting parties, the design of the Permanent PATH station has been adapted to allow for the preservation of the E Subway Passageway that connected to the former World Trade Center.
- Also in response to consulting party input, the Port Authority removed the Vesey Street Stairwell (the only above-ground surviving element of the World Trade Center site) from its purview in the PATH project. The impact of this action on the preservation of this element is unclear since the projects of other agencies are likely to impact the stairwell.

(top)**Tribute in Light, September 2004**
(bottom) **The Sphere, Battery Park**

Photo: RPA

Memorial Center

A memorial center to commemorate the events of September 11, 2001 and February 26, 1993 will be located underground in the southwest corner of the World Trade Center site. The Center will include a permanent exhibition on September 11, as well as changing exhibitions, with the aim of enriching the public's understanding of the attacks within a historical, cultural and social perspective. The exhibits will include: reason-

able access to the slurry wall and box-beam columns that made up Towers One and Two; artifacts of the World Trade Center site that survived the disaster; personal stories and tributes to the victims of the attack; details of the spontaneous memorials and commemorations that occurred after 9/11; and accounts of the evacuation, rescue and recovery efforts following the disaster. These details, among others, are included among the recommendations of the Memorial Center Advisory Committee convened by the LMDC that finalized its recommendations in August 2004. These recommendations will guide consultants to the LMDC responsible for programming the Memorial Center's exhibitions.

Policy Assessment

With few exceptions, the LMDC's memorial process closely followed the process recommended by the Civic Alliance memorial committee in 2002, by clearly articulating the goals and guidelines of the competition, selecting a highly distinguished jury and protecting them from outside pressures, and by outlining a clear and deliberative process that was easy to understand and was followed through. Although within the Civic Alliance memorial committee there was disagreement over how much public input was appropriate between the first and second phases of the LMDC's memorial competition, the LMDC conducted a competition that struck a balance between providing extensive public input opportunities and keeping the jury shielded from outside influence, by displaying models in the Winter Garden and accepting comment cards, but little else. Additional opportunity for interactive public input was provided by Imagine New York, which conducted workshops on the final memorial designs and provided a web site for extensive comment. Whether an alternative official approach that incorporated more public input would have resulted in a different or better memorial design is unclear, but the opportunity is now past.

The Irish Hunger Memorial, Battery Park City

Photo: RPA

In light of the LMDC's deliberative competition process, reactions to the selected memorial design have been mixed. At best, Reflecting Absence has evoked a lukewarm response from the public – eliciting neither strong support nor passionate opposition. While the reinstatement of an at-grade plaza at the WTC site has been praised for its potential to reconnect the memorial site with the urban fabric around it, the loss of the Libeskind plan's evocative sunken pit and exposed slurry wall concept is regretted by supporters of the plan. In an internal August 2004 memo, the Civic Alliance memorial committee observed that the Reflecting Absence memorial design failed to meet the committee members' high expectations and lacked a strong, unique representation of and connection with the tragedy of 9/11, but concluded that as a practical matter the committee could only argue to change or amend but not replace the jury's choice.

Outstanding Issues

Programmatic and Logistical Issues

The ultimate success of the memorial as a commemorative place that does justice to the impacts of September 11 will depend on a host of issues that have yet to be resolved, such as how to accommodate great numbers of visitors and reconcile possibly conflicting goals of openness and public access with the provision of contemplative and peaceful space.

Integration with the larger site

The fluid nature of the WTC site master plan, its phasing, and the design of individual buildings must be taken into account in planning for the memorial. Master planning and the memorial should be integrated as much as possible, as recommended two years ago by the Civic Alliance memorial committee. Sustainable design guidelines now being developed for the memorial site should be coordinated with the sustainable guidelines that apply to commercial buildings on the site to take advantage of site-wide infrastructure and opportunities for natural system coordination.

Section 106

Numerous outstanding issues in the Section 106 process are being debated as of August 2004. Consulting parties are particularly concerned about the potential impact of the WTC Permanent PATH station on the truncated box beam column bases that delineate the perimeter footprints of Towers One and Two, as well as other historic remnants that may be adversely impacted by the project. The Port Authority is attempting to minimize the impact on the box beam column bases, but due to increased ridership projections, plans to build a fourth platform will conflict with some of the columns of Towers One and Two. As of August 2004, the consulting parties and the Port Authority were in discussions about how the impact on the perimeter footprints of the towers could be further reduced.

Funding and Administrative Issues

How the World Trade Center memorial and Memorial Center will be funded and operated on an ongoing basis are open questions. What sort of agency will manage the memorial into the future also must be established.

The urban design challenges of rebuilding the World Trade Center are bound to three important considerations: the World Trade Center site's special significance as a place of memorial; its geographical context within Lower Manhattan and the region; and its ties and proximity to the historic financial district, the Battery and the resources and waterfront of the New York Harbor. These principles guided the Urban Design working group's recommendations of September 2002, and led them to emphasize the importance of implementing strategies that connect the site to the rest of Lower Manhattan and connect Lower Manhattan to its waterfront and the larger region.

Since 2002, planning for the World Trade Center site has moved from the conceptual to the specific, and has confronted design and implementation challenges, particularly in balancing commercial concerns with design for the public realm. This chapter focuses specifically on urban design issues at the World Trade Center site within the context of creating a suitable memorial and promoting economic development, transportation connections and civic amenities for all Lower Manhattan.

Updated Findings

A **partial court decision** in April 2004 rejected developer Larry Silverstein's bid to receive a full $7 billion in insurance payments for the World Trade Center attacks. Instead, the developer will receive at most approximately $3.5 billion, enough to build the Freedom Tower and maintain lease payments on the site, but little else. The impact of this decision is that subsequent commercial buildings on the site will require conventional financing and be subject to market demand for office space, which could take over a decade to fully materialize.

A **General Project Plan (GPP)** adopted in June 2004 by the LMDC board brought the environmental review process for the World Trade Center site to a close and formalized the LMDC's and the Port Authority's respective roles in implementing the Memorial Program, including memorial and cultural uses, and the Redevelopment Plan, including commercial, retail, conference center, hotel, open space and infrastructure components.

The **Site Plan** adopted in the GPP **(Figure 2)** is a pared-down version of the Studio Libeskind master plan, Memorial Foundations, which provided the basis for Libeskind's designation as master planner for the site in February 2003. The GPP Site Plan is represented as a one-dimensional plan of building footprints, PATH terminal, memorial and cultural parcels, major streets, and the spaces around them. The Site Plan provides a general framework for future development on the site, but is depicted in sufficiently minimal detail to allow for substantial future alteration.

Commercial Design Guidelines are described in the GPP as forthcoming, and are intended to ensure that open space, buildings and memorial and cultural components are consistent with the overall vision for the site and demonstrate design excellence. A draft of these guidelines was prepared by Studio Libeskind and shared by the LMDC with design and development professionals and members of the civic community in February 2004, with no subsequent follow-up. No public review of the guidelines has taken place and no date has been specified for their finalization, though the cornerstone of the Freedom Tower (Tower One) was ceremoniously laid on July 4, 2004.

Recommendations

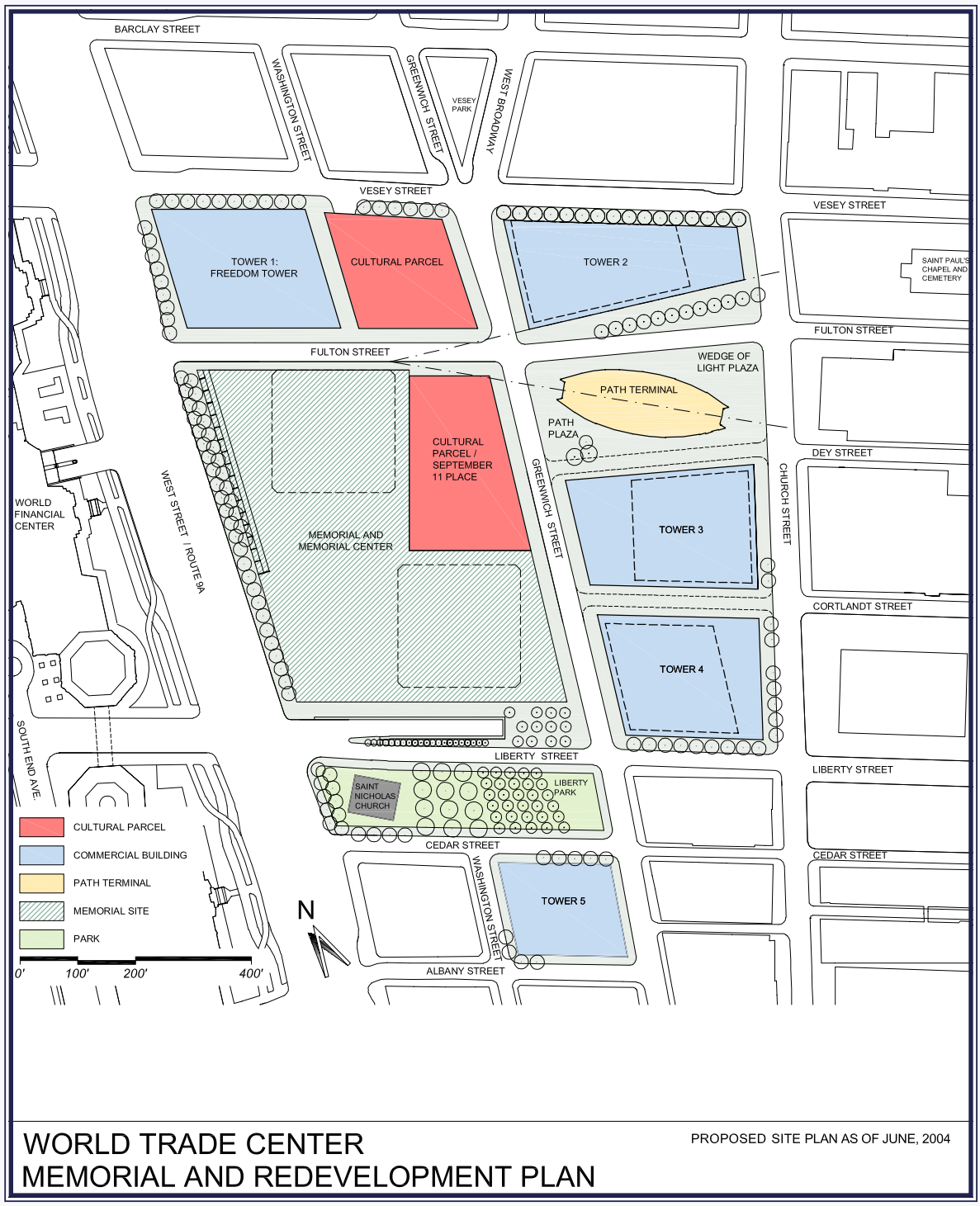
Program

A leading comment from the public at "Listening to the City" in July 2002 was that preliminary plans for the World Trade

Memorial Foundations: Studio Libeskind's 2002 Master Plan for the World Trade Center Site

Image: Studio Daniel Libeskind

Figure 2: WTC Memorial and redevelopment plan



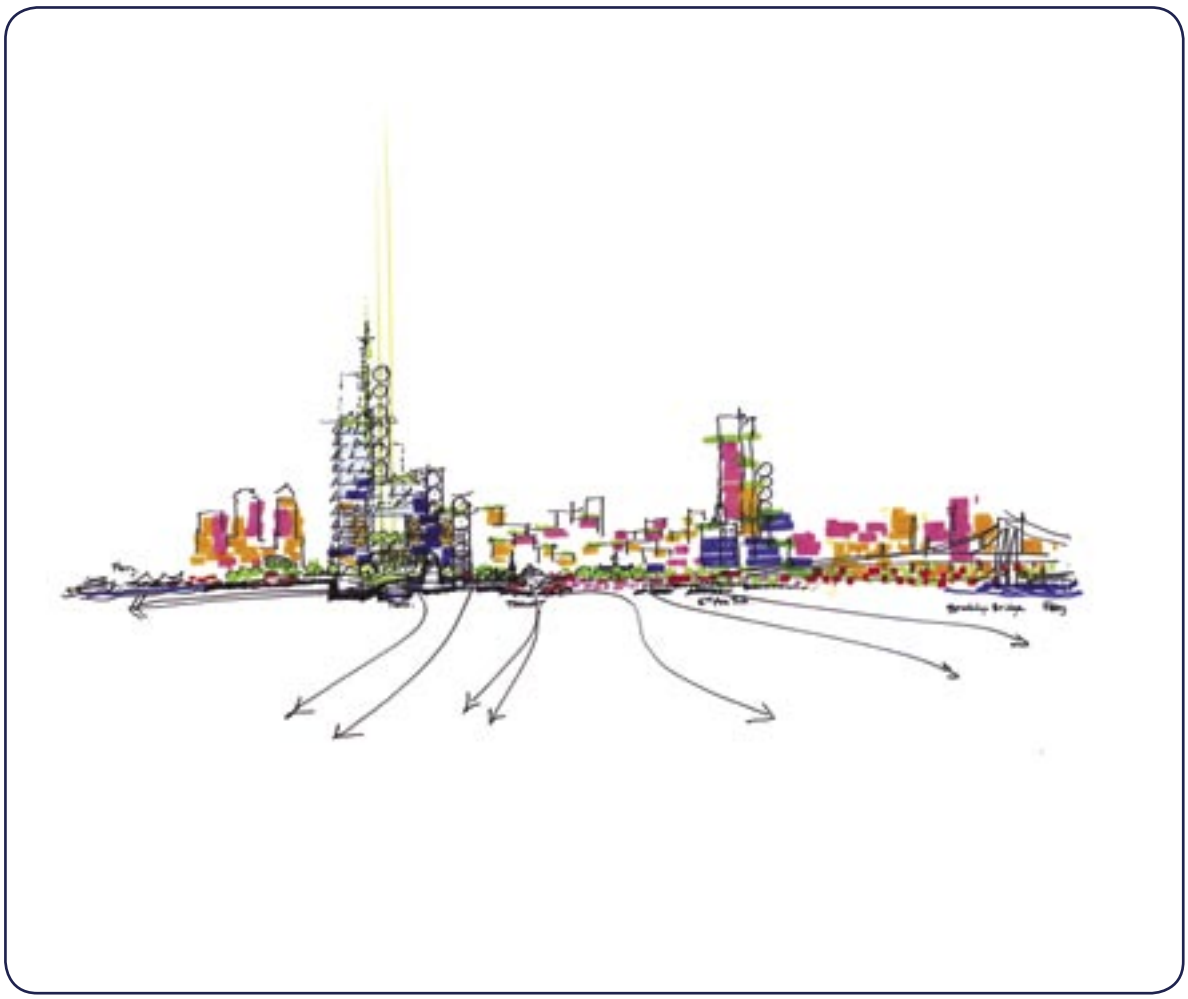
Source: Lower Manhattan Development Corporation

Center site were too commercial, too dense and too boring. Though density on the site has been scaled back and civic and cultural uses added to the mix, the high office space vacancy rate and uncertain market outlook argues for a further diversification of the program, by designating buildings currently planned for office space to civic, cultural, hotel, housing or other uses.

Phasing

The environmental impact statement (EIS) of the World Trade Center Redevelopment Plan estimates it will take over ten years before the amount of commercial office space planned for the WTC site and vicinity can be absorbed, based on the performance of the office market between 1998 – 2003. Therefore, a phasing plan must be created to deal with Tower sites 2, 3, 4 and 5 in the decade before office demand materializes for these sites. One proposal is to build tower pedestals or low-slung buildings to house retail in the interim period. These temporary buildings or permanent pedestals would function as "tax payers", generating revenue, filling out the street wall and attracting pedestrian foot traffic. Major questions surround this proposal, such as what entity would develop and pay for the interim buildings, who would invest in pedestals sufficient to bear the load of subsequent office towers and how they would be designed.

The Civic Alliance Planning Workshop (December 2002) envisioned an iconic tower and mixed uses at the WTC site, knit together with the fabric of Lower Manhattan and new development throughout the district.



Master Plan, Design Guidelines and the Public Realm

One negotiation delaying the finalization of the commercial design guidelines is the tension between maximizing the commercial marketability of office buildings and the enhancement of quality public open space and civic and cultural uses on the site.

As demonstrated by the shrinking amount of open space since early versions of the Libeskind Plan and the corresponding widening of Tower footprints on site, the developer is seeking to maximize the amount of rentable floor space in buildings at the World Trade Center site, particularly to counter the significant amount of floor space required for reinforced elevator cores and extra stairwells demanded by enhanced safety and evacuation precautions.

The commercial viability of office buildings at the WTC site is criticalto the success of the entire site and to Lower Manhattan's economic revitalization. However, providing ample and quality public open and green space, reducing sidewalk crowding and ensuring a safe and pleasant experience for pedestrians will form the greatest impression of the success or failure of the entire project as an urban place. The Port Authority and LMDC should move ahead to create a comprehensive open space plan as a single design for the public and open spaces of the World Trade Center site. More powerful than leaving the public realm to the direction of guidelines, this strategy would ensure the integration of the entire site with the memorial, and promote a high quality design experience in the interim period before full build-out of the site.

Creating a broadly supported, well crafted and sufficiently prescriptive set of design guidelines, a proper structure for their administration and implementation, and a comprehensive open space plan will ensure that goals of design excellence and quality public spaces are achieved. As the Freedom Tower moves forward and plans for public spaces lag behind, not a day should be wasted in moving forward with these strategies.

Policy Assessment

Libeskind' s evocative master plan, Memorial Foundations, reinforced three important planning precepts for the World Trade Center site: the centrality of the memorial, its integration with the entire master plan and the importance of restoring east-west and north-south movement by extending Fulton and Greenwich Streets through the former super block. The plan also offered something which others in the Innovative Design Study did not: a potential for flexibility and phasing that would be essential in adapting to uncertain market conditions over the next decades.

However, the flexibility of Libeskind's plan has proved so robust that it has been greatly manipulated to accommodate commercial concerns. In retrospect, the centrality and integration of the memorial in the original master plan, the care and attention to public open spaces and the balance of commercial and cultural uses helped win broad support from the public and the civic community. These civic components must be brought back or they risk being lost forever.

According to the agency roles specified in the GPP, the design and implementation of streets and public spaces independent of the memorial will be in the purview of the Port Authority. This work will have the greatest consequence on the public's experience of the site, and therefore should be given high priority in the design process. To ensure that the design of public spaces is not dealt with as an afterthought, the Port Authority should proceed immediately with detailed plans for the design of the World Trade Center site's public spaces for stakeholder review, integration with memorial designs, and implementation.

Civic Amenities

Lower Manhattan's historic character, unique streetscapes, defining waterfront, existing arts community and cultural attractions should be emphasized and built upon to facilitate Lower Manhattan's revitalization and promote its long term economic and cultural vitality. Such was the main thrust of recommendations advanced by the Civic Amenities committee in the 2002 Planning Framework, which recognized that the progress made in promoting parks, cultural activities and residential services by the new and fast-growing communities in the financial district, Battery Park City and Tribeca would need to continue at an accelerated level after 9/11, while addressing the needs of longer-established communities like Chinatown and the Lower East Side that suffered serious environmental and economic impacts as a result of the disaster. In response, federal rebuilding funds have been directed to programs that promote the livability and attractiveness of Lower Manhattan as a series of interconnected residential districts and a cultural and tourism destination for New Yorkers through programmatic and physical planning initiatives.

The most comprehensive approach to addressing Lower Manhattan's revitalization needs to date was offered by Mayor Bloomberg in December 2002 when he delivered his speech, "New York City's Vision for Lower Manhattan", to an audience assembled by the Association for a Better New York. This plan presented a framework for how interrelated urban design, housing, transportation, waterfront and open space projects could be knit together to support a more livable and successful district in the aftermath of 9/11, and was met with wide acceptance in the civic community. Since that time, the LMDC has taken the lead in following up on the City's recommendations, though the progress of off-site planning initiatives has lagged behind development plans for the WTC site.

Fulton Street today (top). **The Brooklyn Battery Tunnel currently defines the Greenwich Street South district** (bottom).

Photos: RPA

Updated Findings

Physical Planning Studies

Fulton Street Corridor Retail Study

The LMDC staff is working with consultant firms Gensler Architecture and Robert A.M. Stern Architects on a $735,000 study of Fulton Street to explore urban design and retail strategies to create a "premier retail, arts and entertainment thoroughfare for Lower Manhattan." Strategies will aim to promote a variety of new retail establishments to serve residents, workers and visitors; enhance building façades and the quality of the streetscape with historic preservation initiatives; and create better east-west connections with wider sidewalks, a continuous street wall and a new Fulton Street bus route. The study coincides with the renovation of the Fulton Street Transportation Center which will organize the current labyrinth of subway lines that lie beneath Fulton Street from Broadway to Williams Street.

Outstanding Issues: Fulton Street

- Though the study was launched over a year ago and consultants have finished their work, no interim public workshops or presentations have taken place, though LMDC has consulted with key stakeholders for input and feedback. One reason for this delay is the federal Uniform Relocation Act (URA), which requires public agencies to notify all property owners in writing before releasing any plans that may impact their property.

- Historic preservationists have catalogued a diverse selection of 19th and early 20th century buildings along Fulton Street of historic significance that could be threatened by redevelopment projects, particularly if new retail establishments demand larger floor plates than the historic buildings provide. The Corbin building at 11 John Street was brought to the attention of the MTA, which has pledged to preserve the building by incorporating it into the new transit center.

- While the LMDC made significant changes to the original Fulton plan in response to historic preservation concerns, many historic structures may be at risk to private sector redevelopment because of the current zoning and lack of historic landmarking.

- An important challenge will be accommodating all of Fulton Street's roles as a pedestrian thoroughfare, new bus route, transit hub and retail and residential corridor.

Greenwich Street South

A study of urban design and traffic solutions to promote housing development in the area bounded by Liberty Street and Battery Place to the north and south, and Broadway and West Street to the east and west, is underway. $880,000 was allocated for this study in October 2002 and consultants Hardy Holzman Pfeiffer Associates and URS Corporation have been retained by the LMDC. No preliminary plans have been presented yet for public review.

Historic preservationists have noticed the presence of significant 19th and early 20th century buildings within the Greenwich Street South area that could be threatened by redevelopment projects – an issue that the study will need to address.

Any major redevelopment or urban design improvements will need to address the Battery Tunnel cut which runs through and defines this neighborhood. Mayor Bloomberg proposed that the mouth of the tunnel be decked over and turned into a new park in his "Vision for Lower Manhattan."

Replacing unattractive Jersey Barriers (top) **with planters and bollards, like on Wall Street** (bottom) **would improve the appearance and ease of use of Lower Manhattan streets while maintaining security.**

Photos: RPA

Open Space and Public Realm Strategy

This study aims to maximize existing open spaces in Lower Manhattan and create new ones, focusing primarily on privately-owned public spaces in the financial district that are currently constrained by security precautions. $385,000 was allocated in January 2004 for a study with the consulting firm Smith Miller and Hawkinson, which is now working on a detailed redesign of Louis Nevelson Plaza, one of the few publicly-owned open spaces explored in the study.

In addition, New York City Department of Parks and Recreation has received $37 million from the LMDC and combined sources for a parks renovation and creation program for more than 19 sites throughout Lower Manhattan. Highlights of this program include the planned transformation of the Bosque area of Battery Park by Dutch landscape architect Piet Oudolf to a new decorative garden, the renovation of the Columbus Park pavilion in Chinatown, and the transformation of a parking area under the approaches to Brooklyn Bridge into a new park at Drumgole Plaza, completed in November 2003.

East River Waterfront Study

New York City Department of City Planning, the Mayor's Office, and NYC Economic Development Corporation are taking the lead in a study to improve access to the East River waterfront by reducing obstructions to the waterfront, enhancing green space, and providing new links and amenities to adjacent communities. International design firm Richard Rogers Partnership and local SHoP architects began work last year. Building on Community Board One and the Downtown Alliance's East River Waterfront study of 2002, additional public workshops took place over the summer of 2004 that were hosted by Community Boards 1 and 3. Phase One results of the study present a range of strategies for creating 220,000 square feet of new open space and 150,000 square feet of new retail and cultural amenities. In the next phase, consultants will explore proposals for future development along the waterfront, refine design plans for pivotal sites, continue public consultation and estimate implementation costs. An examination of options for the South Street Seaport area, a waterfront gateway that has not performed to expectations, should be included in the next phase of the study as part of planned public consultations.

Brooklyn Bridge Anchorage Study

The LMDC has contracted with Weiss Manfredi Architects to conduct a $300,000 study exploring urban design options for connecting the areas to the north and south of the Brooklyn Bridge anchorage. Parsons Brinkerhoff is an additional consultant for the traffic engineering component, and will

draw on its work in Chinatown to propose improvements to pedestrian and vehicular links between the Civic Center, East River waterfront, and Chinatown sub-districts.

Chinatown

While the needs of the Chinatown community in the aftermath of September 11 were slow to be addressed, numerous public and private planning studies and initiatives are now underway. The studies are converging to address a variety of challenges faced by this community of more than 90,000 residents, from parking and circulation problems, to substandard and overcrowded housing, to lack of open space and waterfront access.

The Rebuild Chinatown Initiative (RCI), a project of Asian Americans for Equality, published its report, "America's Chinatown: A Community Plan", in April 2004, proposing eight initiatives to sustain Chinatown's growth and vibrancy as a cultural center, economic hub, historic district and family neighborhood. The RCI effort is complemented by a host of other programs that together could provide solutions to some of Chinatown's longstanding challenges, including several parking and circulation studies sponsored by the LMDC, the New York Metropolitan Transportation Council (NYMTC) and the federal government, a tourism and marketing initiative, and a cultural center feasibility study funded by the LMDC.

Public art can help animate the streets of Lower Manhattan (Foley Square, August 2004).

Photo: RPA

Programmatic Initiatives

Cultural Planning for the WTC Site

In June 2004 the LMDC announced the completion of its year-long international Invitation to Cultural Institutions process, which invited organizations to submit proposals for cultural programming at the World Trade Center site. From 113 proposals received, the LMDC selected four organizations to locate at the World Trade Center site:

The Joyce Theatre International Dance Center will host limited engagements of up to thirty dance companies from around the world each year in a 900-1,000 seat proscenium theatre. It will also host educational, open rehearsal, and demonstration programs for school children and the community and provide support and space to artists and dance companies.

The Signature Theatre Company will have three theatres at the World Trade Center site, including a 499-seat, a 299-seat and a convertible 99-to-199 seat theatre. This company is known for selecting playwrights to host in residence and showcase their work over the course of an entire season. This facility will incorporate educational and flexible programming in their public spaces at various times of the day.

The International Freedom Center is a new organization created specifically for the World Trade Center site that will be devoted to exploring the history of humankind's quest for freedom. It is to be modeled after institutions like the U.S. Holocaust Museum and the National Constitution Center and is intended to attract millions of visitors a year.

The Drawing Center, a fine arts institution currently located in SoHo, is devoted to the exhibition of drawings. For the World Trade Center site it has conceived a program that will focus on major works by historical figures alongside related drawings. The Center also hosts public events and educational programming that will continue at the new space, which will share a building with the International Freedom Center.

These organizations are now entering a six month process with the LMDC in which they will refine their programming, space requirements and develop budget plans and funding sources. In August 2004, the LMDC issued an RFP for architectural services for a Performing Arts Complex to house the Joyce and Signature Theatres and a Museum Complex to house the International Freedom Center and the Drawing Center. The LMDC plans to select architectural firms by the end of September 2004.

While the selection of these organizations for the World Trade Center site provides an important cultural balance to the large amount of commercial office space, the process of selection was conducted almost completely behind closed doors. The closed process may not result in a worse outcome, but it departs from LMDC's stated goal of conducting an open and participatory planning process for the WTC site. As the selected organizations continue planning and feasibility studies through the spring of 2005, there is little opportunity ahead for the public to provide input.

Additional Programmatic Activities

Since September 11, the LMDC has granted funding to a variety of arts and cultural programs, public events, festivals, and tourism activities to attract visitors to Lower Manhattan and promote the district as a vibrant and interesting place to live and work. Some events that have received funding from the LMDC include the Lower Manhattan River to River Festival and the Tribeca Film Festival. A marketing campaign for the "Museums of Lower Manhattan" was recently launched to promote existing museums and cultural institutions downtown. These programs largely respond to recommendations of the Civic Alliance, though the LMDC has been criticized for granting funding to organizations with ties to its board members.

Policy Assessment

The strategy recommended by the Civic Amenities committee of the Civic Alliance of building upon Lower Manhattan's unique historic, cultural, and waterfront assets to strengthen its attractiveness as a residential community and visitor destination has largely been followed by programmatic initiatives funded by the LMDC.

Physical planning studies have also been launched to respond to certain planning goals, such as improving east-west movement across the district; strengthening waterfront access; "greening" Lower Manhattan's streets, plazas and parks; and extending Greenwich Street's character south of the World Trade Center site. Unfortunately, many of these studies have plodded forward at lackluster pace, and in some cases, such as the Fulton Street Corridor study, have included very little opportunity for public input.

The opportunity to tie together the various ongoing off-site planning studies into a single comprehensive plan for Lower Manhattan – such as the Mayor's Vision started to do in December 2002 – has not yet fully been realized. It is essential that separate planning studies come together to emphasize physical neighborhood connections, as well as strengthening civic, cultural, and economic opportunities between different neighborhoods. As one Chinatown leader pointed out, better connections can be made between communities to enhance quality of life and economic opportunity on both sides. For example, are there services in Chinatown that Tribeca residents can better take advantage of? Holistic health treatments? Feng Shui? Fresh seafood? What can be done to bring together the artists and artisans of Tribeca with the artists and artisans of Chinatown?

As the major source of flexible funding for implementing planning studies – the Community Development Block Grants – is rapidly being spent, it is important to complete the off-site planning studies downtown, seek public input, and assign levels of priority and price tags to various initiatives. If this is not done, the variety of worthwhile physical planning studies underway in Lower Manhattan will remain on the books.

Social, Economic and Environmental Justice

Listening to the City played a pivotal role in the WTC planning process but opportunities for public input have since been scaled back.

Photo: Jacqueline Hemmerdinger

The World Trade Center and Lower Manhattan's inextricable relationship with the larger region demands that the challenge of redeveloping Lower Manhattan be approached with a City and Region-wide angle. This region-wide perspective reveals three failures of infrastructure that threaten the competitiveness of New York City as a dynamic and sustainable world city: a crumbling transit system that is under-funded and has failed to support dramatic increases in ridership; outmoded energy infrastructure that disproportionately affects low income communities and communities of color; and a greater need for civic and natural amenities across the City to support vibrant communities and quality of life. To rebuild after 9/11, planning and redevelopment must address these underlying and structural social, environmental and economic justice (SEEJ) issues that preceded 9/11 and that were only exacerbated by the tragedy.

The SEEJ committee of the Civic Alliance has made the case that the tragic events of 9/11 pose an opportunity to address these problems in a more progressive way, memorializing those who lost their lives by conducting an equitable and participatory planning process that would lead towards a more sustainable and competitive City and Region. Most importantly, for the City and Region to pull out of the economic slump engendered by the terrorist attacks and its aftereffects, a more inclusive and sustainable economy is needed to promote its long term health.

Updated Findings

1 New York City and the region are still facing an unprecedented shortage of affordable housing. Policies and programs implemented after 9/11 may exacerbate economic polarization in Lower Manhattan, as public subsidies, such as Liberty Bonds, have financed the development of market-rate and luxury housing.

2 Lower Manhattan and the City's economy are still heavily reliant on certain major sectors, such as the finance industry and tourism. Service and tourism-related jobs do not generally provide adequate wages or opportunities for career advancement. The opportunity to grow new sectors in conjunction with the rebuilding of Lower Manhattan, such as the local manufacturing of green-building architecture components, has not yet been encouraged by public policies or initiatives.

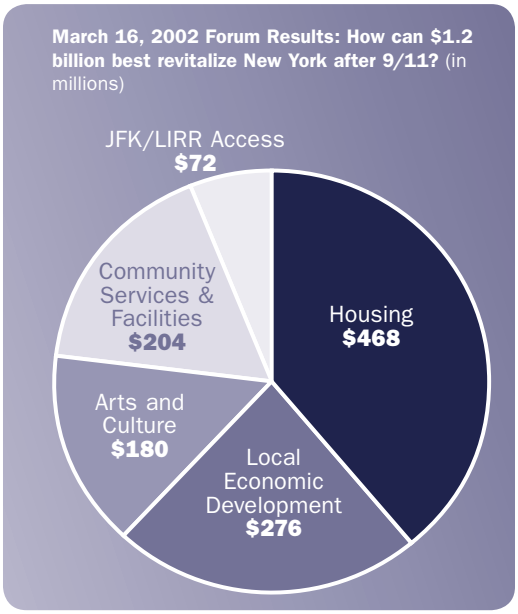
3 Environmental policies and energy structures continue to place burdens on low-income communities and communities of color. While new buildings at the World Trade Center site aim for increased energy efficiency, the majority of waste burdens created by the redevelopment will continue to have effects on external communities.

4 While the physical planning process for the World Trade Center may have enjoyed unprecedented levels of participation at certain points, the level of participation has not remained constant. Furthermore, while broad input was sought for physical planning decisions related to the WTC Site and Memorial, strategies for economic development, investments, and subsidies were largely formed without public consultation.

5 The investment in the recovery and improvement of Lower Manhattan's transit system and connections to the region responds to this committee's recommendation to address longstanding infrastructure issues. As funding is considered for proposed capital projects such as the JFK/LIRR link, the civic community's support for the project is contingent on designing a service that will benefit the greatest number of riders without impacting existing subway lines.

Policy Assessment

Overall, very few of the recommendations of this committee influenced the shape and direction of the Lower Manhattan rebuilding process or post-9/11 economic recovery policies. With two exceptions – the creation of sustainable guidelines for the WTC site and the commitment to transportation infrastructure improvements – the opportunity to rebuild in a more sustainable and socially equitable manner was largely missed, with status quo economic policies characterizing the post-disaster strategy. The most strident failures in this regard are the non-implementation of strategies heavily supported by public input, such as the creation of affordable housing and the implementation of a post 9-11 jobs creation program. While support for these goals, and particularly the creation of affordable housing, have repeatedly surfaced in forums for public input, government policies have not responded to these recommendations.

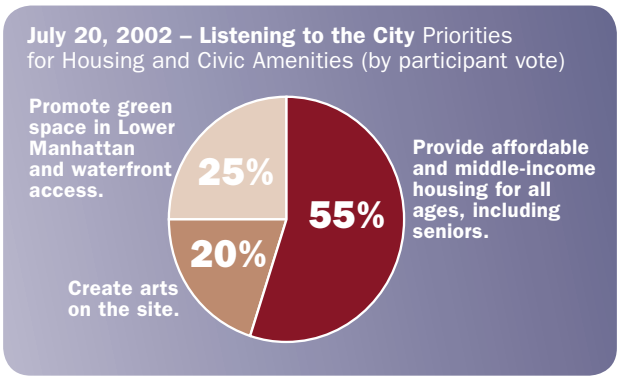


Overall the opportunity to build a more equitable, sustainable and competitive economy in Lower Manhattan in the aftermath of a profound tragedy was not fully taken. And while important gains for public participation were achieved, the level of accountability and transparency in the rebuilding process has not remained constant. As important planning and policy decisions still lie before us, greater attention to the issues of social, environmental and economic justice are essential if Lower Manhattan is to make a full recovery.

Recommendations

- Approximately $869 million remain in flexible CDBG funds. The LMDC must clearly articulate the options for this remaining funding, the time frame for its allocation, and provide a more participatory process for the final decision making.

- Dramatic steps are needed to ensure that Lower Manhattan does not become a district of exclusivity. Public subsidies that benefit market-rate and luxury housing should be broadened to require units affordable to low and moderate income people. Mayor Bloomberg's goal of creating 2,000 units of affordable housing units in Lower Manhattan should still be met.


July 20, 2002 – Listening to the City Priorities for Housing and Civic Amenities (by participant vote)
Promote green space in Lower Manhattan and waterfront access.
25%
55%
Provide affordable and middle-income housing for all ages, including seniors.
20%
Create arts on the site.

- There is no commitment to Universal Design at the World Trade Center: a method of physical design that works for the greatest number of people with and without disabilities. Adopting such an approach would help provide more universal access to the site.

- The shifting of responsibility from the LMDC to the Port Authority for major rebuilding tasks such as planning and implementation of public spaces and administration of sustainable and commercial design guidelines at the World Trade Center site raises questions about the level of public accountability and public participation moving forward. Though the LMDC's public participation process has been far from perfect, they have created multiple structures and ongoing advisory committees for consultation with stakeholders, in addition to providing a great deal of materials on their web site. The Port Authority's track record for public participation has been greatly inferior and fewer resources are available on their web site.

The opportunity for pioneering green building design and environmental sustainability in the redevelopment of the World Trade Center site is unparalleled in the extent of its scope, high profile and potential impact. If the opportunity is realized, the benefits will accrue not only to the environment, but to building users and employees, who enjoy a healthier and more pleasant work environment, and to employers who benefit from lower rates of employee absenteeism and turnover. The success of recent examples of "green" high rise buildings such as the Condé Nast Headquarters at Four Times Square and the popular Solaire residential building in Battery Park City also suggests that the quality-of-life amenities provided by high performance green buildings make them more sought after in the marketplace.

The goal of rebuilding the World Trade Center site as a model of green building design emerged as a strongly supported concept shortly after September 11, echoed in recommendations by civic organizations and participants at "Listening to the City." The LMDC also adopted the goal in their guiding document, "Principles and Revised Blueprint for the Future of Lower Manhattan," yet fell short of setting specific targets or criteria that would measure success. In contrast, the Civic Alliance's Green Building working group proposed ambitious targets for sustainable design and energy efficiency, such as aiming for zero net carbon dioxide emissions and water waste at the site, and for achieving a Platinum level LEED certification from the U.S. Green Building Council. To date, few existing policies or actions would lead towards these goals being met at the World Trade Center site.

The most ambitious green building planned in New York is the Bank of America Headquarters at One Bryant Park – not at Ground Zero.

Image: ©dbox for Cook+Fox Architects

Updated Findings

The **U.S. Green Building Council's** LEED (Leadership in Energy and Environmental Design) rating system for green buildings is gaining currency, as more commercial and residential projects seek LEED certification every year. A recent New York Times article reported that three commercial office buildings in New York City, including World Trade Center Seven developed by Silverstein Properties, the Hearst Building at Eighth Avenue and 56th Street, and the planned Bank of America building developed by the Durst Organization at One Bryant Park, will all seek LEED certification. The Bank of America building is aiming to achieve the first LEED platinum rating for a high rise building, with significant sustainable features such as a floor-based ventilation system, an electricity generating station that will take care of most the building's electricity, and systems to capture, recycle and reuse all the rainwater and wastewater on the property.

The **LMDC's Sustainable Design Guidelines** for the World Trade Center site provide a framework for commercial buildings on the WTC site to satisfy a range of LEED and New York State Executive Order 111 objectives. While the guidelines provide an array of admirable goals for individual building performance, they are deficient in their focus on individual buildings as opposed to the entire World Trade Center site as an interconnected system. The guidelines also exclude the memorial and cultural buildings and public spaces at the site, all of which are dealt with separately in a set of guidelines that were released for stakeholder review in August 2004.

Despite their narrow scope, the WTC sustainable guidelines point developers towards a series of measures that would help individual buildings achieve the standard LEED certification, and a LEED Silver rating if followed at their optimal level. Achieving a LEED Silver rating is worthy, though it falls two levels short of what the midtown Bank of America building is aiming for, and one level short of the nearby LEED Gold-certified Solaire building at 20 River Terrace.

One challenge that World Trade Center developers will face is the integration of sus-

tainable features in speculative office buildings. Since many aspects of green building design depend on the tenant fit-out, building green before office space is leased can be a challenge. The new LEED "Core and Shell" guidelines have emerged to address this problem, which have helped guide the WTC Sustainable Guidelines, and Silverstein's development of WTC 7.

World Trade Center Seven, the first commercial office building to rise from the former World Trade Center complex, will aim for LEED certification by incorporating a host of high performance features, including provisions for deep day-lighting into interior work spaces, recycling of rain water for landscape irrigation, and energy conservation measures.

Preliminary architectural renderings for the 1,776 foot **Freedom Tower** released in December 2003 incorporated an integrated wind farm atop the building that would provide 20% of the building's energy needs, though little information about the turbines has been provided since that time. It is unclear whether the Freedom Tower will aim for LEED certification.

Environmental Performance Commitments (EPC) have been adopted by the multiple public agencies leading the Lower Manhattan recovery projects to minimize air pollution and cumulative construction impacts. These commitments aim to reduce emissions of fine particulate matter by requiring ultra low sulfur diesel fuel (ULSDF) in off-road construction equipment, retrofitting diesel engines and limiting vehicle idling. However, the EPCs do not incorporate a coordinated goods movement plan that would significantly reduce truck trips related to construction, and fail to regulate pollution from construction trucks by extending the same restrictions on stationary sources of pollution to mobile sources. In addition to what they fail to regulate, the commitments do not specify how they will be enforced or impose penalties for non-compliance.

Policy Assessment

It is perhaps too soon to judge whether the redevelopment of the World Trade Center site will achieve the lofty environmental goals set out for it by the civic community and the public. Though the creation of the World Trade Center Sustainable Guidelines by the LMDC represents a commitment to a certain level of environmental performance, their most ambitious recommendations are already being eclipsed by new projects in other parts of the City. Furthermore, in the absence of an administrative structure for the environmental design review and a commitment to the guidelines' enforcement by a presiding agency such as the Port Authority, their adherence – even at the minimum level – is not ensured.

The Solaire in Battery Park City is the first hi-rise residential building to receive an LEED Gold rating for environmental performance.

Photo: RPA

The Civic Alliance's overriding recommendation for the World Trade Center environmental review process is familiar to the point of seeming rote: that an open, robust, transparent planning process with full opportunity for public participation is critical to the decision-making process. This goal is interrelated to the other major principle of the regulatory working group, that every effort should be made to minimize unnecessary delays in the administrative and judicial review processes associated with Lower Manhattan's redevelopment. In other words, by conducting the most participatory planning process possible and incorporating the concerns of various parties, public agencies could minimize the risk that the World Trade Center site development (and Lower Manhattan's recovery) would be delayed by litigation.

To a large extent, these principles have shaped the LMDC's Final General Environmental Impact Statement (FGEIS) prepared pursuant to the National Environmental Policy Act (NEPA) and the State Environmental Quality Review Act (SEQRA), which was finalized in April 2004 and formed the basis for the General Project Plan that was adopted by their board two months later. However, while the LMDC's FGEIS may be sufficiently procedurally sound to avoid or minimize litigation, the opportunity to use the environmental review process as a resource for gathering public input on real options for the site's development was not taken, as the EIS process was postponed until after major decisions about the program and site planning had been made.

Updated Findings

The **World Trade Center Memorial and Redevelopment Plan FGEIS**, for which LMDC is the lead agency, encompasses the memorial, cultural, and commercial development programs for the World Trade Center's sixteen acres and the added Southern Site that includes two additional blocks south of Liberty Street. The FGEIS does not include the WTC Permanent PATH station, which is undergoing a separate environmental review process led by the Port Authority.

In addition to the FGEIS for the World Trade Center site, multiple recovery and transportation projects are currently going through separate environmental review processes for projects that will coincide in the peak construction year of 2006. These projects include: Route 9A Project, South Ferry Terminal, Fulton Street Transit Center, and the Permanent WTC PATH Terminal.

Cumulative impacts of the multiple Lower Manhattan recovery projects are a major concern, particularly for air pollution. The WTC FGEIS has proposed to mitigate air pollution and other cumulative impacts through the adoption of a set of **Environmental Performance Commitments (EPC)** by the LMDC, the Port Authority, MTA and NYSDOT to address air quality, noise and vibration, cultural and historic resources, access and circulation, economic effects and environmental design.

The EPC propose to **mitigate air pollution** by requiring the use of ultra-low sulfur diesel fuel (ULSDF) in all heavy duty off-road construction equipment, such as generators and tractors; by limiting unnecessary idling time to three minutes; and by retrofitting off-road diesel engines with oxidation catalysts, particulate filters, engine upgrades or replacements. Organizations such as Environmental Defense and the Civic Alliance have argued that the EPC are not sufficient because they fall short of specifying procedures for enforcement or penalties for non-compliance, and fail to require that ULSDF and best-available retrofit technology standards be applied to mobile sources, such as trucks moving to and from construction sites in addition to the on-site generators and heavy duty stationary equipment.

The **judicial efficiency** of the environmental review will be tested by the first lawsuit that has been filed seeking an injunction against construction at the World Trade Center site. The lawsuit was filed by the Coalition of 9/11 Families, pursuant to the **Section 106 Historic Review Process**, to prevent the construction of the Permanent PATH station from blocking access to the box beam column remnants that delineate the perimeters of the Twin Tower footprints.

Policy Assessment

Environmental review processes for the World Trade Center site and other Lower Manhattan Recovery projects are now completed or substantially underway. With some exceptions, the administrative portion of the environmental review process (EIS scoping, drafting and finalization) was not used as a planning tool to gather public input on options under consideration but rather to document the impacts of a previously-agreed- upon plan. This describes the environmental review process for the World Trade Center site, which offered no legitimate alternatives to the program of up to ten million square feet of office space, 1 million square feet of retail and 500,000 square feet of

hotel space. The failure to consider alternatives to this development program formed the basis of the Civic Alliance's primary complaint with the WTC FGEIS.

Not all EISs failed to consider a range of viable alternatives, however, and they are worth pointing out. The Draft Supplemental EIS (SEIS) for the Route 9A/ West Street project presents a full analysis of three alternatives for the project: the Short Bypass, At Grade and No Action. Though Governor Pataki publicly supported the Short Bypass option prior to the study, equal analyses of all three alternatives were presented in the EIS, and no "Preferred Direction" was named. The outcome of the Final Determination for this project will indicate whether the EIS process helped shape the direction of the study, particularly because public input has differed from the Governor's stated preference for the Short Bypass alternative. The Port Authority's DEIS for the Permanent WTC PATH Terminal is another example of two legitimate options being presented in the EIS process, as it considers both an Alternative with and without the controversial Liberty Plaza Connection.

While the administrative portion of environmental review has fallen short of Civic Alliance expectations, time will tell whether these shortcomings will cause a protracted judicial period, or whether the development process will proceed unscathed by litigation.

EndNotes

Major Findings and Reommendations

1 The U.S. Green Building Council's LEED (Leadership in Energy and Environmental Design) guidelines provide an independent rating system for green buildings. The achievable levels are: certified, silver-certified, gold-certified, and platinum-certified. The WTC Sustainable Guidelines, if followed, would help buildings achieve the certified or silver-certified level.

Economic Development

1 According to the U.S. Bureau of Labor Statistics, NYC posted 437,700 private jobs in Financial Activities in July '04 compared to 491,700 in July 2000.

2 NYS Department of Labor cited in "State of Lower Manhattan." Alliance for Downtown New York 2003.

3 NYS Department of Labor private employment annual averages.

4 New York State Department of Labor data, quarterly/seasonally adjusted by NYC Comptroller's Office. (William C. Thompson, Jr. Comptroller. "Economic Notes." Vol. XII, No. 2. June 2004.)

5 Mayor Michael Bloomberg, "New York City's Vision for Lower Manhattan." Speech first delivered to the Association for Better New York, December 12, 2002.

6 David Dunlap, "Liberty Bonds' Yield: a New Downtown." The New York Times. May 30, 2004.

7 The status of this plan is available on LMDC's web site at:http://www.renewnyc.com/FundingInitiatives/partialact_plans.shtml.htm [accessed September 7, 2004].

8 Diana Basket and Jennifer Michael, "Vision for Childcare and Early Education in Lower Manhattan." NOW Legal Defense and Education Fund, Child Care, Inc. and United Way of New York City.

9 New York City Independent Budget Office, "Three Years After: Where is the $20 Billion in Federal WTC Aid?" No. 132, August 11, 2004.

Glossary of Acronyms

CDBG
Community Development Block Grants

DGEIS
Draft Generic Environmental Impact Statement

EPC
Environmental Performance Commitments

FGEIS
Final Generic Environmental Impact Statement

GIS
Geographical Information Systems

GPP
General Project Plan

HUD
United States Department of Housing and Urban Development

LEED
Leadership in Energy and Environmental Design

LMDC
Lower Manhattan Development Corporation

LMEPF
Lower Manhattan Emergency Preservation Fund

MTA
Metropolitan Transportation Authority

NYCDOT
New York City Department of Transportation

NYSDOT
New York State Department of Transportation

NYSERDA
New York State Energy Research and Development Authority

PANYNJ
Port Authority of New York and New Jersey

PATH
Port Authority Trans Hudson

RFP
Request for Proposals

SEIS
Supplemental Environmental Impact Statement

ULSDF
Ultra-low sulfur diesel fuel

THIS REPORT WAS WRITTEN BY PETRA TODOROVICH, ASSOCIATE PLANNER AT REGIONAL PLAN ASSOCIATION WITH CONTRIBUTIONS OF RPA STAFF, INCLUDING: JENNIFER COX, CHRISTOPHER JONES, ROB LANE, NICOLAS RONDEROS, JEREMY SOFFIN, THOMAS K. WRIGHT, ROBERT D. YARO, AND JEFFREY ZUPAN. GRAPHIC DESIGN BY JEFF FERZOCO.

WE WOULD LIKE TO THANK THE FOLLOWING INDIVIDUALS FOR THEIR REVIEW, CONSULTATIONS OR INPUT REGARDING THIS REPORT.

DIANA BALMORI, BALMORI ASSOCIATES
BARRY BENEPE, FINE ARTS FEDERATION OF NY
REBEKA BIEBER, STUDIO RED
JOAN BYRON,
PRATT INSTITUTE CENTER FOR COMMUNITY AND ENVIRONMENTAL DEVELOPMENT
BETTINA DAMIANI, GOOD JOBS NEW YORK
DAVID DYSSEGAARD KALLICK, FISCAL POLICY INSTITUTE
LISA FRIGAND, CON EDISON
ANTHONY GARDNER,
COALITION OF 9/11 FAMILIES
EVA HANHARDT, MUNICIPAL ART SOCIETY
ROGER HERZ, TIME/ TO IMPROVE MUNICIPAL EFFICIENCY
MARGARET HUGHES, GOOD OLD LOWER EAST SIDE
SETH JOHNSON, MUNICIPAL ART SOCIETY
KEN LUSTBADER, LOWER MANHATTAN EMERGENCY PRESERVATION FUND
RIVKA MAZAAR
NED MCGUIRE
CATHERINE MCVAY HUGHES
NANCY OWENS
JESSE POZZULI, REBUILD DOWNTOWN OUR TOWN (R.DOT)/ ARCHITECTURAL RESEARCH INSTITUTE
MARIAN IMPERATORE
PAUL EPSTEIN
RON SHIFFMAN, PRATT INSTITUTE
ROBERT WEBER, ASIAN AMERICANS FOR EQUALITY AND THE REBUILD CHINATOWN INITIATIVE
JOE WEISBORD, HOUSING FIRST!
BEVERLY WILLIS, REBUILD DOWNTOWN OUR TOWN (R.DOT)/ ARCHITECTURAL RESEARCH INSTITUTE

Regional Plan Association

NJ CT NY

4 Irving Place
7th floor
New York, NY 10003
212.253.2727

Two Landmark Square
Suite 108
Stamford, CT 06901
203.356.0390

94 Church Street
Suite 401
New Brunswick, NJ 08901
732.828.9945

Regional Plan Association (RPA) is an independent regional planning organization that improves the quality of life and the economic competitiveness of the 31-county New York-New Jersey-Connecticut region through research, planning, and advocacy. Since 1922, RPA has been shaping transportation systems, protecting open spaces, and promoting better community design for the region's continued growth. We anticipate the challenges the region will face in the years to come, and we mobilize the region's civic, business, and government sectors to take action.

RPA's current work is aimed largely at implementing the ideas put forth in the Third Regional Plan, with efforts focused in five project areas: community design, open space, transportation, workforce and the economy, and housing. For more information about Regional Plan Association, please visit our web site, www.rpa.org.

BOARD OF DIRECTORS

Chairman
Peter W. Herman

Vice Chairman and Co-Chairman, New Jersey
Christopher J. Daggett

Vice Chairman and Co-Chairman, New Jersey
Hon. James J. Florio

Vice Chairman and Co-Chairman, Connecticut
John S. Griswold, Jr.

Vice Chairman and Co-Chairman, Connecticut
Matthew S. Kissner

Vice Chairman and Co-Chairman, Long Island
Robert A. Scott

President
Robert D. Yaro

Treasurer
Brendan J. Dugan

Robert F. Arning
Hilary M. Ballon
Charles A. Bauer
Laurie Beckelman
Stephen R. Beckwith
Edward J. Blakely
J. Max Bond, Jr.
Roscoe C. Brown, Jr.
Richard J. Carbone
Edward T. Cloonan
Tina Cohoe
Jill M. Considine
Michael R. Cowan
Paul A. Crotty
Alfred A. DelliBovi
Nancy R. Douzinas
Barbara J. Fife
Michael Golden
David B. Hilder
Arthur E. Imperatore, Jr.
Kenneth T. Jackson
Ira H. Jolles
Richard A. Kahan
Richard D. Kaplan
Shirley Strum Kenny
Susan S. Lederman
Richard C. Leone
Charles J. Maikish
Joseph J. Maraziti, Jr.
John L. McGoldrick
The Very Reverend James Parks Morton
Peter H. Nachtwey
Jan Nicholson
James S. Polshek
Richard Ravitch
Gregg Rechler
Robert N. Rich
Mark F. Rockefeller
Elizabeth Barlow Rogers
Janette Sadik-Khan
Stevan A. Sandberg
H. Claude Shostal
Susan L. Solomon
Luther Tai
Karen E. Wagner
Mary Ann Werner
Paul T. Williams Jr.
William M. Yaro